STIC Search Report
EIC 1700

STIC Database Tracking Number: 158372

TO: Duc Truong **Location: REM 10D71** **Art Unit : 1711** **July 18, 2005** **Case Serial Number: 10/777095**	**From: Les Henderson** **Location: EIC 1700** **REM 4B28 / 4A30** **Phone: 571-272-2538** **Leslie.henderson@uspto.gov**

Search Notes

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=> d his

     (FILE 'HOME' ENTERED AT 13:42:20 ON 18 JUL 2005)

     FILE 'HCAPLUS' ENTERED AT 13:44:12 ON 18 JUL 2005
                E US20040212042/PN
L1            1 S US20040212042/PN
                SEL L1 RN

     FILE 'REGISTRY' ENTERED AT 13:44:39 ON 18 JUL 2005
L2           38 S E1-E38

     FILE 'LREGISTRY' ENTERED AT 13:45:50 ON 18 JUL 2005
L3              STR
L4              STR L3

     FILE 'REGISTRY' ENTERED AT 13:59:59 ON 18 JUL 2005
L5            0 S L3
L6              SCR 2043
L7            0 S L6 AND L3
L8            0 S L6 AND L4

     FILE 'LREGISTRY' ENTERED AT 14:09:06 ON 18 JUL 2005
L9              STR

     FILE 'REGISTRY' ENTERED AT 14:10:24 ON 18 JUL 2005
L10          18 S L6 AND L9

     FILE 'LREGISTRY' ENTERED AT 14:17:46 ON 18 JUL 2005
L11             STR L9

     FILE 'REGISTRY' ENTERED AT 14:23:31 ON 18 JUL 2005
L12          10 S L6 AND L11
L13        4788 S L6 AND L9 FUL
                SAV L13 DUC095/A

     FILE 'LREGISTRY' ENTERED AT 15:22:30 ON 18 JUL 2005
L14             STR

     FILE 'REGISTRY' ENTERED AT 15:24:59 ON 18 JUL 2005
L15          19 S (L9 AND L14) SSS SAM SUB=L13

     FILE 'LREGISTRY' ENTERED AT 15:29:16 ON 18 JUL 2005
L16             STR L14
L17             STR

     FILE 'REGISTRY' ENTERED AT 15:35:56 ON 18 JUL 2005
L18           0 S (L17 AND L9) SSS SAM SUB=L13
L19          15 S L16 AND L9 SSS SAM SUB=L13
L20          15 S (L16 OR L17) AND L9 SSS SAM SUB=L13
L21           0 S (L3 OR L4) SSS SAM SUB=L13
L22           0 S L3 SSS SAM SUB=L13

     FILE 'LREGISTRY' ENTERED AT 16:18:46 ON 18 JUL 2005
L23             STR L17
L24             STR

     FILE 'REGISTRY' ENTERED AT 16:26:36 ON 18 JUL 2005
L25           0 S L23 SSS SAM SUB=L13
L26           2 S L24 SSS SAM SUB=L13
L27          15 S L16 SSS SAM SUB=L13

     FILE 'LREGISTRY' ENTERED AT 16:29:53 ON 18 JUL 2005
L28             STR L16

     FILE 'REGISTRY' ENTERED AT 16:37:33 ON 18 JUL 2005
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L29           0 S L28 SSS SAM SUB=L13

     FILE 'LREGISTRY' ENTERED AT 16:39:54 ON 18 JUL 2005
L30             STR

     FILE 'REGISTRY' ENTERED AT 16:41:30 ON 18 JUL 2005
L31          27 S L30 SSS SAM SUB=L13

     FILE 'LREGISTRY' ENTERED AT 16:44:26 ON 18 JUL 2005
L32             STR L16
L33             STR L28

     FILE 'REGISTRY' ENTERED AT 16:54:18 ON 18 JUL 2005
L34          15 S L32 SSS SAM SUB=L13
L35           0 S L33 SSS SAM SUB=L13
L36          16 S (L24 OR L32 OR L33) SAM SUB=L13
L37         418 S (L24 OR L32 OR L33) FUL SUB=L13
L38         177 S L37 AND 1/NC
                SAV L37 DUC095A/A
                SAV L38 DUC095B/A

     FILE 'HCAPLUS' ENTERED AT 17:00:40 ON 18 JUL 2005
L39         224 S L37
L40         126 S L38

     FILE 'REGISTRY' ENTERED AT 17:01:13 ON 18 JUL 2005

     FILE 'LREGISTRY' ENTERED AT 17:05:11 ON 18 JUL 2005

     FILE 'REGISTRY' ENTERED AT 17:05:50 ON 18 JUL 2005
L41           2 S L24 SSS SAM SUB=L13
L42         112 S L24 SSS FUL SUB=L13
                SAV L42 DUC095C/A

     FILE 'LREGISTRY' ENTERED AT 17:07:26 ON 18 JUL 2005
L43             STR L24

     FILE 'REGISTRY' ENTERED AT 17:08:01 ON 18 JUL 2005
L44           2 S L43 SSS SAM SUB=L13
L45           0 S L33 SSS SAM SUB=L13
L46          25 S L33 SSS FUL SUB=L13
                SAV L46 DUC095D/A
L47           1 S L42 AND 1/NC
L48          10 S L46 AND 1/NC

     FILE 'HCAPLUS' ENTERED AT 17:13:40 ON 18 JUL 2005
L49          73 S L42
L50          24 S L46
L51           1 S L47
L52          20 S L48
                E FILM/CT
                E FILMS/CT
                E E3+ALL

     FILE 'REGISTRY' ENTERED AT 17:34:35 ON 18 JUL 2005
L53          10 S L48 NOT L47
L54         111 S L42 NOT (L53 OR L47)
L55         115 S L37 NOT (L38 OR L42 OR L44 OR L46 OR L47 OR L48)
L56         111 S L42 NOT L47
L57          15 S L46 NOT L48

     FILE 'HCAPLUS' ENTERED AT 17:43:35 ON 18 JUL 2005
L58           6 S L57

     FILE 'REGISTRY' ENTERED AT 17:47:13 ON 18 JUL 2005
L59         166 S L38 NOT (L47 OR L48)
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      FILE 'HCAPLUS' ENTERED AT 17:48:08 ON 18 JUL 2005
L60          122 S L59
L61           73 S L54
L62           92 S L55
L63           73 S L56
L64        11501 S ORG?(3N)(FILM OR THINFILM?)(3N)TRANSISTOR? OR TFT
L65            3 S L39 AND L64
L66           73 S L56
L67           26 S L50 OR L65
L68           59 S L66 NOT L67
L69          198 S L39 NOT L67
L70          197 S L69 NOT L51
L71          139 S L70 NOT L68
L72          194 S L70 AND 1907-2004/PY,PRY
L73          102 S L70 AND P/DT
L74           95 S L70 NOT L73
L75           78 S L74 NOT 2004-2005/PY
L76           87 S L73 AND 1907-2001/AY,PRY
L77          165 S L75 OR L76
L78           56 S L68 AND 1907-2004/PY,PRY
L79           12 S L68 AND P/DT
L80           47 S L68 NOT L79
L81           38 S L80 NOT 2004-2005/PY
L82            8 S L79 AND 1907-2001/AY,PRY
L83           46 S L81 OR L82
L84          119 S L77 NOT L83

=> d que stat l67
L6                SCR 2043
L9                STR

     4
    Cb
     ~
Cb~N~Cb
 1  2  3

NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
GGCAT   IS UNS  AT   1
GGCAT   IS UNS  AT   3
GGCAT   IS UNS  AT   4
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS   4

STEREO ATTRIBUTES: NONE
L13          4788 SEA FILE=REGISTRY SSS FUL L6 AND L9
L24               STR

P 2             P 1


NODE ATTRIBUTES:
CONNECT IS M1  RC AT   1
CONNECT IS M1  RC AT   2
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS   2

STEREO ATTRIBUTES: NONE
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L32 STR

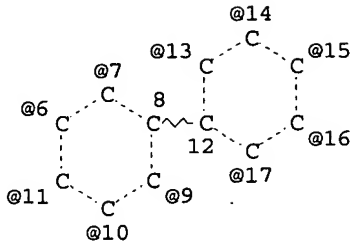
C=CH-Cy~CH=C
1 2 3 4 5

NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
GGCAT IS UNS AT 3
DEFAULT ECLEVEL IS LIMITED
ECOUNT IS M4-X14 C M0-X1 S AT 3

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 5

STEREO ATTRIBUTES: NONE
L33 STR

C=CH CH=C
1 @2 @4 5



VPA 2-7/6/11/10/9 U
VPA 4-13/14/15/16/17 U
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 16

STEREO ATTRIBUTES: NONE
L37 418 SEA FILE=REGISTRY SUB=L13 SSS FUL (L24 OR L32 OR L33)
L39 224 SEA FILE=HCAPLUS ABB=ON PLU=ON L37
L46 25 SEA FILE=REGISTRY SUB=L13 SSS FUL L33
L50 24 SEA FILE=HCAPLUS ABB=ON PLU=ON L46
L64 11501 SEA FILE=HCAPLUS ABB=ON PLU=ON ORG?(3A)(FILM OR THINFILM?)(3A)TRANSISTOR? OR TFT
L65 3 SEA FILE=HCAPLUS ABB=ON PLU=ON L39 AND L64
L67 26 SEA FILE=HCAPLUS ABB=ON PLU=ON L50 OR L65

=> d l67 cbib abs hitstr hitind

L67 ANSWER 1 OF 26 HCAPLUS COPYRIGHT 2005 ACS on STN
2005:522620 Document No. 143:35110 Electrophotographic apparatus, photoreceptors therefor, process cartridges therewith, and method for forming images with high density and resolution thereby. Shibata, Toyoko; Sakimura, Tomoko; Asano, Masao (Konica Minolta Business Technologies, Inc., Japan). Jpn. Kokai Tokkyo Koho JP 2005156799 A2 20050616, 92 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2003-393571 20031125.

AB The photoreceptors contain (A) pigments based on metal-free condensed polycyclic compds. (e.g., perylenes) and containing metal atoms (e.g., Ti, Cu, Fe) and (B) mixts. of X(CTM)nY (CTM = electron-transporting group; X, Y = H, halo, monovalent organic group; n = 0-10; with the proviso that when X = Y = H or halo, n = 1-10) with x + y ≤99% (x, y = concentration of the maximum and the 2nd maximum

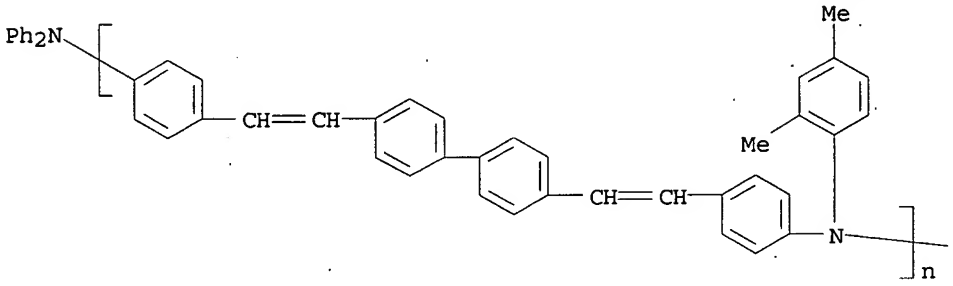
component, resp.). Also claimed are photoreceptors having A-containing charge-generating layers and B-containing charge-transporting layers. In process cartridges, the photoreceptors are held together with chargers, imagers, developers, transfer means, charge removers, and/or cleaning means.

IT **767336-14-1**
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(oligomers, charge transporters; del delectrophotog. photoreceptors having charge-transporting oligomers and metal-containing condensed polycyclic pigments for forming high-resolution images)

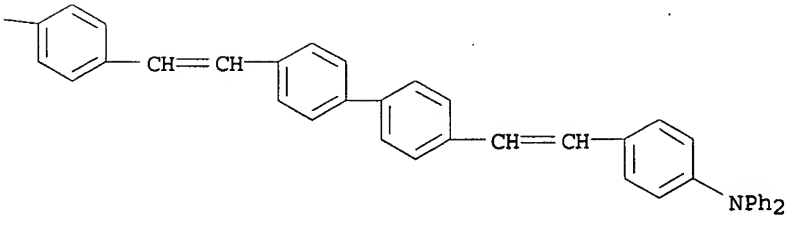
RN 767336-14-1 HCAPLUS

CN Poly[[(2,4-dimethylphenyl)imino]-1,4-phenylene-1,2-ethenediyl[1,1'-biphenyl]-4,4'-diyl-1,2-ethenediyl-1,4-phenylene], α-[4-[2-[4'-[2-[4-(diphenylamino)phenyl]ethenyl][1,1'-biphenyl]-4-yl]ethenyl]phenyl]ω-(diphenylamino)- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



IC ICM G03G005-06

CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38

IT **767336-14-1**
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)

(oligomers, charge transporters; del delectrophotog. photoreceptors having charge-transporting oligomers and metal-containing condensed polycyclic pigments for forming high-resolution images)

=> d l67 2-26 cbib abs hitstr hitind

L67 ANSWER 2 OF 26 HCAPLUS COPYRIGHT 2005 ACS on STN
2005:522619 Document No. 143:35109 Electrophotographic apparatus, photoreceptors therefor, process cartridges therewith, and method for forming images with high density and resolution thereby. Shibata, Toyoko; Sakimura, Tomoko; Asano, Masao (Konica Minolta Business Technologies, Inc., Japan). Jpn. Kokai Tokkyo Koho JP 2005156798 A2 20050616, 90 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2003-393570 20031125.

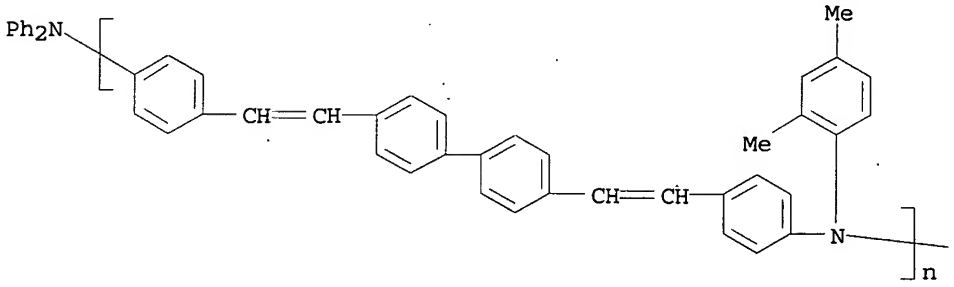
AB The photoreceptors contain adducts of Ti phthalocyanines and 1,2-glycols and mixts. of X(CTM)nY (CTM = electron-transporting group; X, Y = H, halo, monovalent organic group; n = 0-10; with the proviso that when X = Y = H or halo, n = 1-10) with x + y ≤99% (x, y = concentration of the maximum and the 2nd maximum component, resp.). Also claimed are photoreceptors having charge-generating layers containing the adducts and charge-transporting layers containing the mixts. In process cartridges, the photoreceptors are held together with chargers, imagers, developers, transfer means, charge removers, and/or cleaning means.

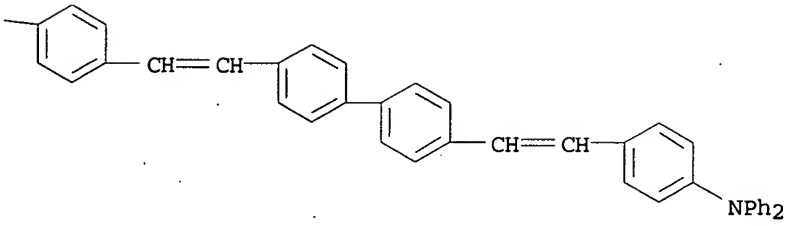
IT **767336-14-1**
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(oligomers, charge transporters; electrophotog. photoreceptors containing charge-transporting oligomers and titanyl phthalocyanine α-glycol adducts for forming high-resolution images)

RN 767336-14-1 HCAPLUS

CN Poly[[(2,4-dimethylphenyl)imino]-1,4-phenylene-1,2-ethenediyl[1,1'-biphenyl]-4,4'-diyl-1,2-ethenediyl-1,4-phenylene], α-[4-[2-[4'-[2-[4-(diphenylamino)phenyl]ethenyl][1,1'-biphenyl]-4-yl]ethenyl]phenyl]ω-(diphenylamino)- (9CI) (CA INDEX NAME)

PAGE 1-A



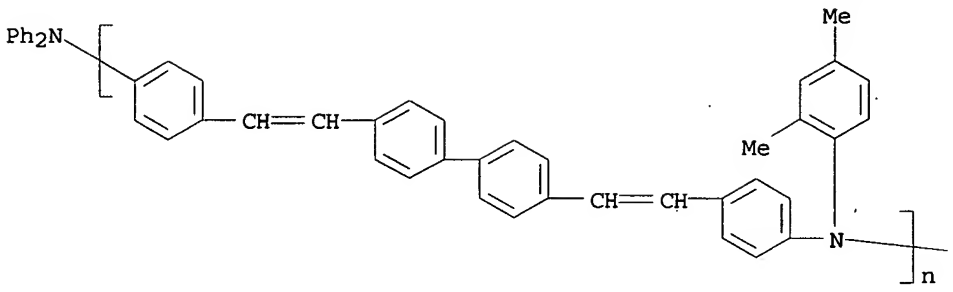


IC ICM G03G005-06
CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
IT 767336-06-1 767336-07-2 767336-08-3 767336-09-4 767336-10-7 767336-11-8 **767336-14-1** 767336-21-0 851957-15-8 851957-16-9 851957-17-0 851957-20-5 851957-21-6 851957-25-0 852944-40-2
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(oligomers, charge transporters; electrophotog. photoreceptors containing charge-transporting oligomers and titanyl phthalocyanine-α-glycol adducts for forming high-resolution images)

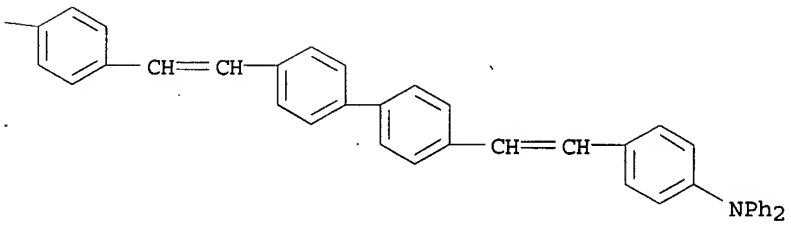
L67 ANSWER 3 OF 26 HCAPLUS COPYRIGHT 2005 ACS on STN
2005:522618 Document No. 143:35108 Electrophotographic apparatus, photoreceptors therefor, process cartridges therewith, and method for forming images with high density and resolution thereby.
Sakimura, Tomoko; Shibata, Toyoko; Asano, Masao; Yamazaki, Hiroshi (Konica Minolta Business Technologies, Inc., Japan). Jpn. Kokai Tokkyo Koho JP 2005156797 A2 20050616, 83 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2003-393569 20031125.
AB The photoreceptors contain Ga phthalocyanine pigments and mixts. of X(CTM)nY (CTM = electron-transporting group; X, Y = H, halo, monovalent organic group; n = 0-10; with the proviso that when X = Y = H or halo, n = 1-10) with x + y≤99% (x, y = concentration of the maximum and the 2nd maximum component, resp.). Also claimed are photoreceptors having charge-generating layers containing the pigments and charge-transporting layers containing the mixts. In process cartridges, the photoreceptors are held together with chargers, imagers, developers, transfer means, charge removers, and/or cleaning means.
IT **767336-14-1**
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(oligomers, charge transporters; electrophotog. photoreceptors having charge-transporting oligomers and gallium phthalocyanine pigments for forming high-resolution images)
RN 767336-14-1 HCAPLUS
CN Poly[[(2,4-dimethylphenyl)imino]-1,4-phenylene-1,2-ethenediyl[1,1'-biphenyl]-4,4'-diyl-1,2-ethenediyl-1,4-phenylene], α-[4-[2-[4'-[2-[4-(diphenylamino)phenyl]ethenyl][1,1'-biphenyl]-4-yl]ethenyl]phenyl]ω-(diphenylamino)- (9CI) (CA

INDEX NAME)

PAGE 1-A



PAGE 1-B



IC ICM G03G005-07
ICS C08G061-12; G03G005-06; C07C211-54; C07C215-82
CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
IT 767336-06-1 767336-07-2 767336-08-3 767336-09-4 767336-10-7 767336-11-8 **767336-14-1** 767336-21-0 851957-15-8 851957-16-9 851957-17-0 851957-20-5 851957-21-6 851957-26-1 852944-40-2
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(oligomers, charge transporters; electrophotog. photoreceptors having charge-transporting oligomers and gallium phthalocyanine pigments for forming high-resolution images)

L67 ANSWER 4 OF 26 HCAPLUS COPYRIGHT 2005 ACS on STN
2005:450059 Document No. 142:490352 Electrophotographic apparatus, photoreceptors therefor, process cartridges therewith, and method for forming high-quality sharp images thereby. Sakimura, Tomoko; Shibata, Toyoko (Konica Minolta Business Technologies, Inc., Japan). Jpn. Kokai Tokkyo Koho JP 2005134709 A2 20050526, 90 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2003-371847 20031031.
AB The photoreceptors contain X(CTM)nY mixts. (CTM = charge-transporting group; X, Y = H, halo, monovalent organic group; n

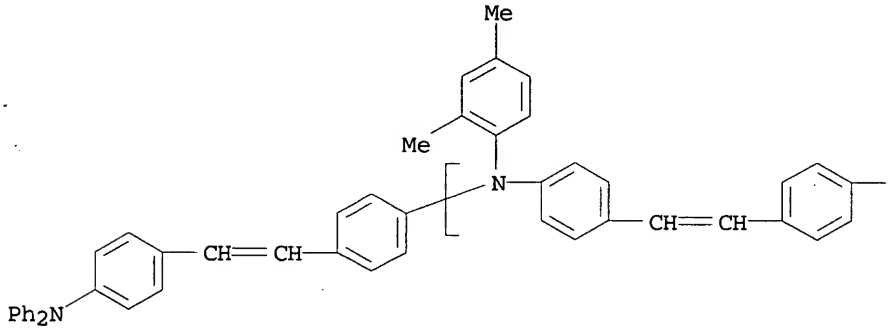
= 0-10; with the proviso that when X = Y = H, n = 1-10) with x + y ≤99% (x, y = concentration of the maximum and the 2nd maximum components, resp.). In photoreceptors having (A) charge-generating layers and (B) charge-transporting layers in this order on conductive supports, the above mixts. and monodisperse charge transporters are contained in one and other layers in B, resp. In process cartridges, the photoreceptors are held together with chargers, imagers, developers, transfer means, charge removers, and/or cleaning means.

IT **851957-18-1**
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(oligomers, charge transporters; electrophotog. photoreceptors having charge-transporting oligomers and substances in different layers for forming high-quality sharp images)

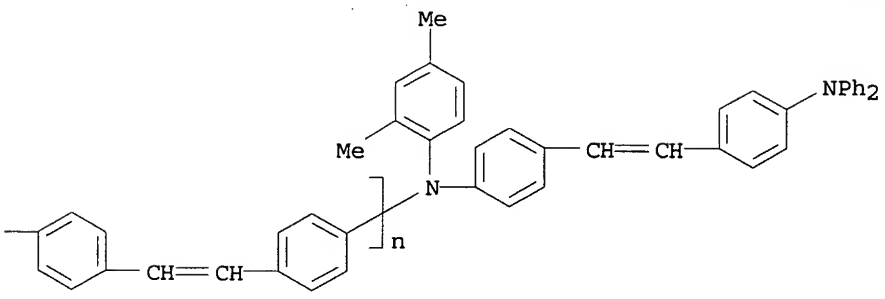
RN 851957-18-1 HCAPLUS

CN Poly[[(2,4-dimethylphenyl)imino]-1,4-phenylene-1,2-ethenediyl[1,1'-biphenyl]-4,4'-diyl-1,2-ethenediyl-1,4-phenylene], α-[4-[2-[4-(diphenylamino)phenyl]ethenyl]phenyl]ω-[(2,4-dimethylphenyl)[4-[2-[4-(diphenylamino)phenyl]ethenyl]phenyl]amino]-(9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



IC ICM G03G005-06
ICS G03G005-043

CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38

IT 767336-06-1 767336-07-2 767336-08-3 767336-09-4 767336-10-7
767336-11-8 767336-21-0 851957-15-8 851957-16-9 851957-17-0
851957-18-1 851957-19-2 851957-20-5 851957-21-6

RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(oligomers, charge transporters; electrophotog. photoreceptors having charge-transporting oligomers and substances in different layers for forming high-quality sharp images)

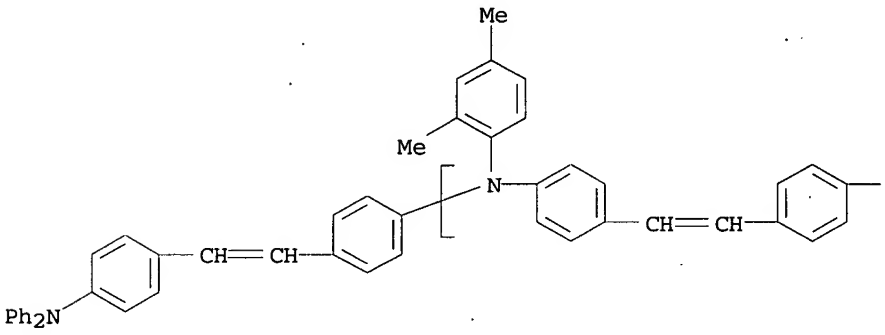
L67 ANSWER 5 OF 26 HCAPLUS COPYRIGHT 2005 ACS on STN
2005:450047 Document No. 142:490348 Electrophotographic apparatus, photoreceptors therefor, process cartridges therewith, and method for forming high-quality sharp images thereby. Sakimura, Tomoko; Shibata, Toyoko (Konica Minolta Business Technologies, Inc., Japan). Jpn. Kokai Tokkyo Koho JP 2005134607 A2 20050526, 79 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2003-370109 20031030.

AB The photoreceptors contain (A) X(CTM)nY mixts. (CTM = charge-transporting group; X, Y = H, halo, monovalent organic group; n = 0-10; with the proviso that when X = Y = H, n = 1-10) with mol. weight ≤1000-fraction 10-90%. Also claimed are photoreceptors having charge-generating layers on conductive supports and A-containing charge-transporting layers thereon. In process cartridges, the photoreceptors are held together with chargers, imagers, developers, transfer means, charge removers, and/or cleaning means.

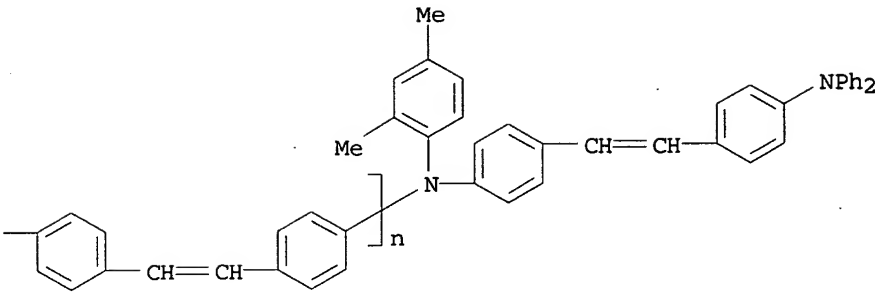
IT **851957-18-1**
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(oligomers, charge transporters; electrophotog. photoreceptors having charge-transporting oligomers for forming high-quality sharp images)

RN 851957-18-1 HCAPLUS
CN Poly[[(2,4-dimethylphenyl)imino]-1,4-phenylene-1,2-ethenediyl[1,1'-biphenyl]-4,4'-diyl-1,2-ethenediyl-1,4-phenylene], α-[4-[2-[4-(diphenylamino)phenyl]ethenyl]phenyl]ω-[(2,4-dimethylphenyl)[4-[2-[4-(diphenylamino)phenyl]ethenyl]phenyl]amino]- (9CI) (CA INDEX NAME)

PAGE 1-A



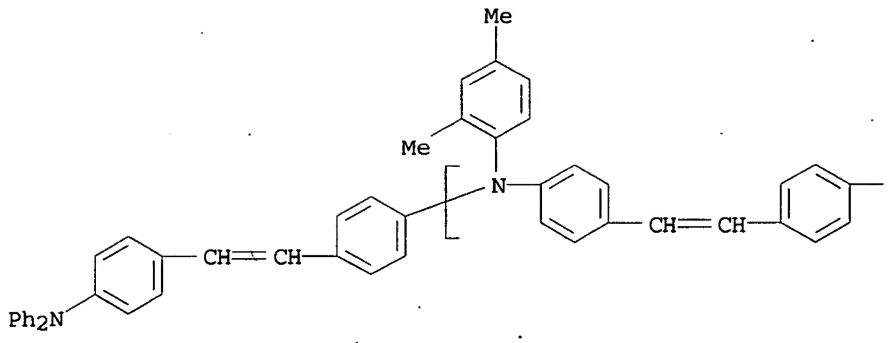
PAGE 1-B



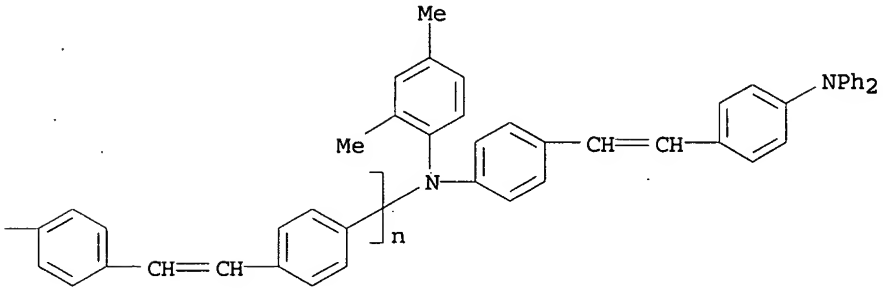
IC ICM G03G005-06
CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
IT 767336-06-1 767336-07-2 767336-08-3 767336-09-4 767336-10-7
767336-11-8 767336-21-0 851957-15-8 851957-16-9 851957-17-0
851957-18-1 851957-19-2 851957-20-5 851957-21-6
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(oligomers, charge transporters; electrophotog. photoreceptors having charge-transporting oligomers for forming high-quality sharp images)

L67 ANSWER 6 OF 26 HCAPLUS COPYRIGHT 2005 ACS on STN
2005:450034 Document No. 142:490345 Electrophotographic apparatus, photoreceptors therefor, process cartridges therewith, and method for forming high-quality sharp images thereby. Sakimura, Tomoko; Shibata, Toyoko; Yamazaki, Hiroshi; Asano, Masao (Konica Minolta Business Technologies, Inc., Japan). Jpn. Kokai Tokkyo Koho JP 2005134516 A2 20050526, 91 pp. (Japanese). CODEN: JKXXAF.
APPLICATION: JP 2003-368610 20031029.
AB The photoreceptors contain (A) X(CTM)nY mixts. (CTM = charge-transporting group; X, Y = H, halo, monovalent organic group; n = 0-10; with the proviso that when X = Y = H, n = 1-10) with x + y ≤99% (x, y = concentration of the maximum and the 2nd maximum components, resp.) and have (B) inorg. particles (e.g., hydrophobic silica) on the surfaces. In photoreceptors having charge-generating layers and charge-transporting layers in this order on conductive supports, the mixts. A are contained in the charge-transporting layers. In process cartridges, the photoreceptors are held together with chargers, imagers, developers, transfer means, charge removers, and/or cleaning means.
IT **851957-18-1**
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(oligomers, charge transporters; electrophotog. photoreceptors having charge-transporting oligomers and surface inorg. particles for forming high-quality sharp images)
RN 851957-18-1 HCAPLUS
CN Poly[[(2,4-dimethylphenyl)imino]-1,4-phenylene-1,2-ethenediyl[1,1'-biphenyl]-4,4'-diyl-1,2-ethenediyl-1,4-phenylene], α-[4-[2-[4-(diphenylamino)phenyl]ethenyl]phenyl]ω-[(2,4-dimethylphenyl)[4-[2-[4-(diphenylamino)phenyl]ethenyl]phenyl]amino]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



IC ICM G03G005-06
ICS G03G005-147

CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38

IT 767336-06-1 767336-07-2 767336-08-3 767336-09-4 767336-10-7
767336-11-8 851957-15-8 851957-16-9 851957-17-0
851957-18-1 851957-19-2 851957-20-5 851957-21-6
851974-35-1
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(oligomers, charge transporters; electrophotog. photoreceptors having charge-transporting oligomers and surface inorg. particles for forming high-quality sharp images)

L67 ANSWER 7 OF 26 HCAPLUS COPYRIGHT 2005 ACS on STN

2005:450033 Document No. 142:490344 Electrophotographic apparatus, photoreceptors therefor, process cartridges therewith, and method for forming high-quality sharp images thereby. Shibata, Toyoko; Sakimura, Tomoko; Yamazaki, Hiroshi; Asano, Masao (Konica Minolta Business Technologies, Inc., Japan). Jpn. Kokai Tokkyo Koho JP 2005134515 A2 20050526, 89 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2003-368609 20031029.

AB The photoreceptors contain (A) X(CTM)nY mixts. (CTM = charge-transporting group; X, Y = H, halo, monovalent organic group; n = 0-10; with the proviso that when X = Y = H, n = 1-10) with x + y ≤99% (x, y = concentration of the maximum and the 2nd maximum components, resp.) and electron-injecting layers. In photoreceptors having charge-generating layers and charge-transporting layers in this

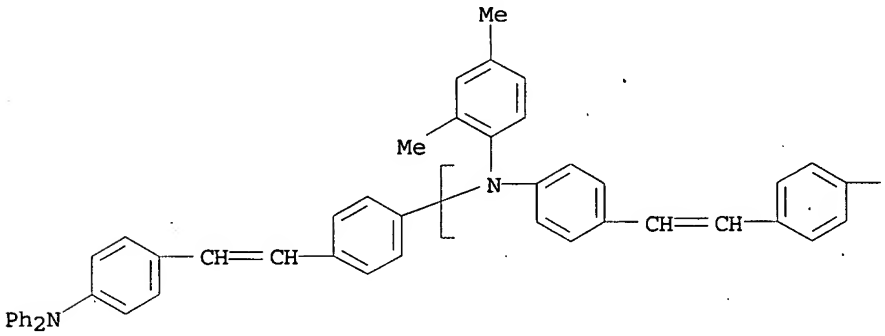
order on conductive supports, the mixts. A are contained in the charge-transporting layers. In process cartridges, the photoreceptors are held together with chargers, imagers, developers, transfer means, charge removers, and/or cleaning means.

IT **851957-18-1**
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(oligomers, charge transporters; electrophotog. photoreceptors having charge-transporting oligomers and electron-injecting layers for forming high-quality sharp images)

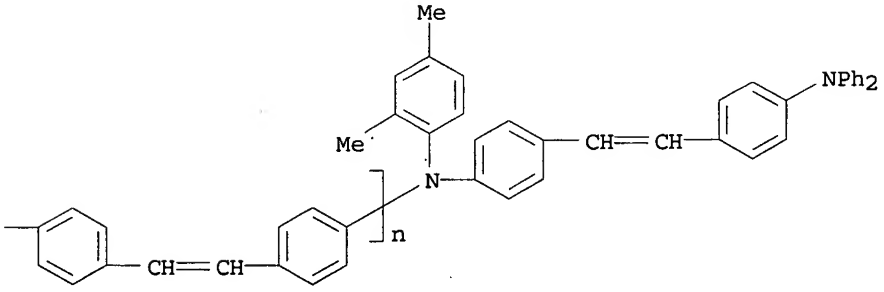
RN 851957-18-1 HCAPLUS

CN Poly[[(2,4-dimethylphenyl)imino]-1,4-phenylene-1,2-ethenediyl[1,1'-biphenyl]-4,4'-diyl-1,2-ethenediyl-1,4-phenylene], α-[4-[2-[4-(diphenylamino)phenyl]ethenyl]phenyl]ω-[(2,4-dimethylphenyl)[4-[2-[4-(diphenylamino)phenyl]ethenyl]phenyl]amino]-(9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



IC ICM G03G005-07
ICS G03G005-147

CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38

IT 767336-06-1 767336-07-2 767336-08-3 767336-09-4 767336-10-7
767336-11-8 767336-21-0 851957-15-8 851957-16-9 851957-17-0
851957-18-1 851957-19-2 851957-20-5 851957-21-6
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(oligomers, charge transporters; electrophotog. photoreceptors having charge-transporting oligomers and electron-injecting

layers for forming high-quality sharp images)

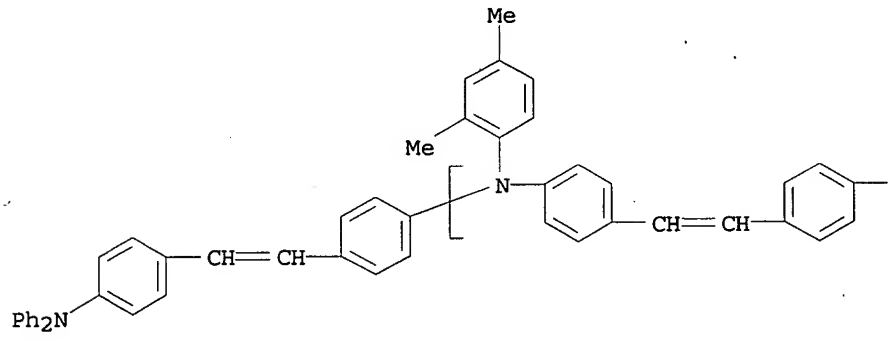
L67 ANSWER 8 OF 26 HCAPLUS COPYRIGHT 2005 ACS on STN
2005:450032 Document No. 142:490343 Electrophotographic apparatus, photoreceptors therefor, process cartridges therewith, and method for forming high-quality sharp images thereby. Shibata, Toyoko; Sakimura, Tomoko; Yamazaki, Hiroshi; Asano, Masao (Konica Minolta Business Technologies, Inc., Japan). Jpn. Kokai Tokkyo Koho JP 2005134514 A2 20050526, 112 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2003-368608 20031029.

AB The photoreceptors contain (A) crosslinked siloxanes (containing other polymers, antioxidants, and/or charge-transporting components) and (B) X(CTM)nY mixts. (CTM = charge-transporting group; X, Y = H, halo, monovalent organic group; n = 0-10; with the proviso that when X = Y = H, n = 1-10) with x + y≤99% (x, y = concentration of the maximum and the 2nd maximum components, resp.). Photoreceptors having charge-generating layers on conductive supports, B-containing charge-transporting layers thereon, and A-containing surface layers are also claimed. In process cartridges, the photoreceptors are held together with chargers, imagers, developers, transfer means, charge removers, and/or cleaning means.

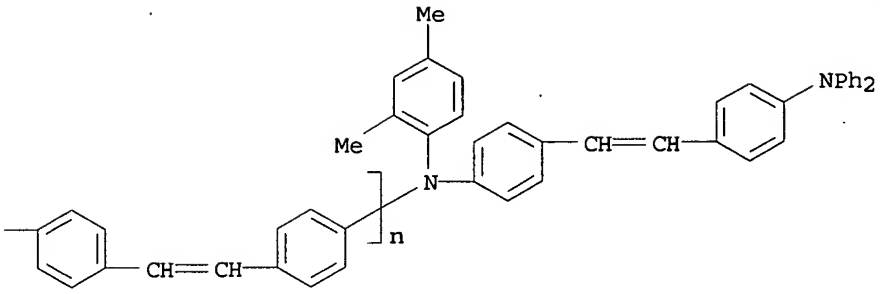
IT **851957-18-1**
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(oligomers, charge transporters; electrophotog. photoreceptors containing charge-transporting oligomers and crosslinked siloxanes for forming high-quality sharp images)

RN 851957-18-1 HCAPLUS
CN Poly[[(2,4-dimethylphenyl)imino]-1,4-phenylene-1,2-ethenediyl[1,1'-biphenyl]-4,4'-diyl-1,2-ethenediyl-1,4-phenylene], α-[4-[2-[4-(diphenylamino)phenyl]ethenyl]phenyl]ω-[(2,4-dimethylphenyl)[4-[2-[4-(diphenylamino)phenyl]ethenyl]phenyl]amino]-(9CI) (CA INDEX NAME)

PAGE 1-A



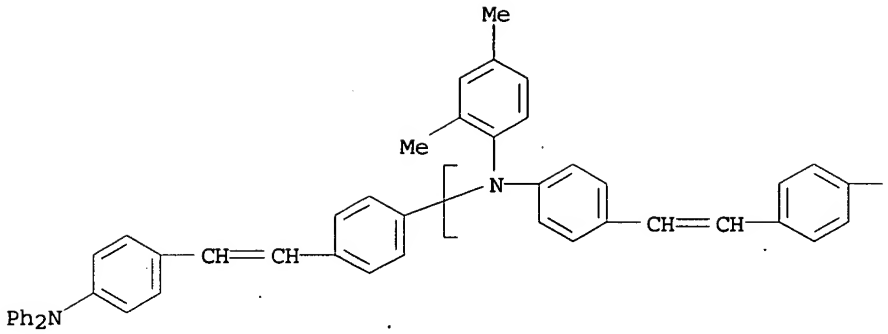
PAGE 1-B



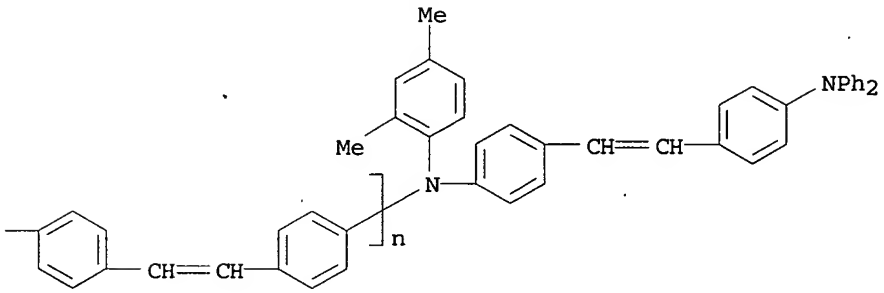
IC ICM G03G005-07
ICS G03G005-05; G03G005-147
CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
IT 767336-06-1 767336-07-2 767336-08-3 767336-09-4 767336-10-7
767336-11-8 767336-21-0 851957-15-8 851957-16-9 851957-17-0
851957-18-1 851957-19-2 851957-20-5 851957-21-6
851957-26-1
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(oligomers, charge transporters; electrophotog. photoreceptors containing charge-transporting oligomers and crosslinked siloxanes for forming high-quality sharp images)

L67 ANSWER 9 OF 26 HCAPLUS COPYRIGHT 2005 ACS on STN
2005:445387 Document No. 142:490340 Electrophotographic apparatus, photoreceptors therefor, process cartridges therewith, and method for forming high-quality sharp images thereby. Shibata, Toyoko; Sakimura, Tomoko; Yamazaki, Hiroshi; Asano, Masao (Konica Minolta Business Technologies, Inc., Japan). Jpn. Kokai Tokkyo Koho JP 2005134606 A2 20050526, 87 pp. (Japanese). CODEN: JKXXAF.
APPLICATION: JP 2003-370108 20031030.
AB The photoreceptors contain (A) X(CTM)nY mixts. (CTM = charge-transporting group; X, Y = H, halo, monovalent organic group; n = 0-10; with the proviso that when X = Y = H, n = 1-10) with x + y ≤99% (x, y = concentration of the maximum and the 2nd maximum components, resp.) and have (B) (F-containing) organic particles (e.g., hydrophobic silica) on the surfaces (e.g., in protective layers). In photoreceptors having charge-generating layers and charge-transporting layers in this order on conductive supports, the mixts. A are contained in the charge-transporting layers. In process cartridges, the photoreceptors are held together with chargers, imagers, developers, transfer means, charge removers, and/or cleaning means.
IT **851957-18-1**
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(oligomers, charge transporters; electrophotog. photoreceptors having charge-transporting oligomers and surface organic particles for forming high-quality sharp images)
RN 851957-18-1 HCAPLUS
CN Poly[[(2,4-dimethylphenyl)imino]-1,4-phenylene-1,2-ethenediyl[1,1'-biphenyl]-4,4'-diyl-1,2-ethenediyl-1,4-phenylene], α-[4-[2-[4-(diphenylamino)phenyl]ethenyl]phenyl]ω-[(2,4-dimethylphenyl)[4-[2-[4-(diphenylamino)phenyl]ethenyl]phenyl]amino]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



IC ICM G03G005-06
ICS C07C211-54; G03G005-147

CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38

IT 767336-06-1 767336-07-2 767336-08-3 767336-09-4 767336-10-7
767336-11-8 767336-21-0 851957-15-8 851957-16-9 851957-17-0
851957-18-1 851957-19-2 851957-20-5 851957-21-6
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(oligomers, charge transporters; electrophotog. photoreceptors having charge-transporting oligomers and surface organic particles for forming high-quality sharp images)

L67 ANSWER 10 OF 26 HCAPLUS COPYRIGHT 2005 ACS on STN

2005:253750 Document No. 142:325662 Ethynylsilane copolymers useful as hole-transporting materials for organic electroluminescent devices. Oshita, Joji; Kunai, Atsuaki (Tokuyama Corp., Japan). Jpn. Kokai Tokkyo Koho JP 2005075935 A2 20050324, 23 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2003-308411 20030901.

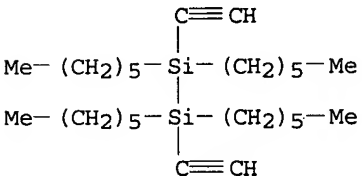
AB The copolymers, showing Mw 500-100,000, have repeating units (A) C.tplbond.CAr1 and (B) C.tplbond.C(SiR1R2)nC.tplbond.CAr2 [R1, R2 = (substituted) alkyl, aryl, heteroaryl; Ar1, Ar2 = (substituted) C10-100 arylene, N-containing heterocyclic C3-100π-excessive heteroarylene, N-free heterocyclic C8-100π-excessive heteroarylene, specific styrylene, specific phenylenevinylene, etc.; n = 1-10], satisfying number of unit ratio B/A 0.01-500. The ethynylsilane copolymer hole-transporting materials show good heat resistance.

IT **848151-01-9P 848151-02-0P**
RL: DEV (Device component use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)
(ethynylsilane copolymers useful as hole-transporting materials for organic electroluminescent devices)

RN 848151-01-9 HCAPLUS
CN Benzenamine, 4,4'-([1,1'-biphenyl]-4,4'-diyldi-2,1-ethenediyl)bis[N-(3-bromophenyl)-N-phenyl-, polymer with 1,2-diethynyl-1,1,2,2-tetrahexyldisilane (9CI) (CA INDEX NAME)

CM 1

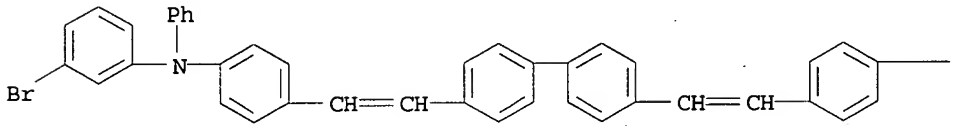
CRN 848151-00-8
CMF C28 H54 Si2



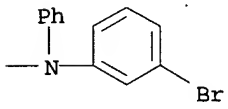
CM 2

CRN 848150-99-2
CMF C52 H38 Br2 N2

PAGE 1-A

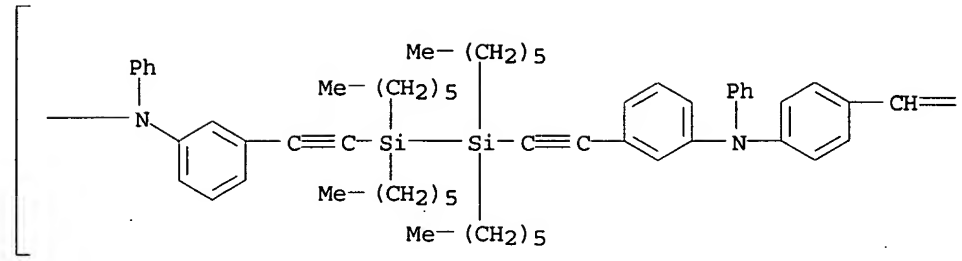


PAGE 1-B

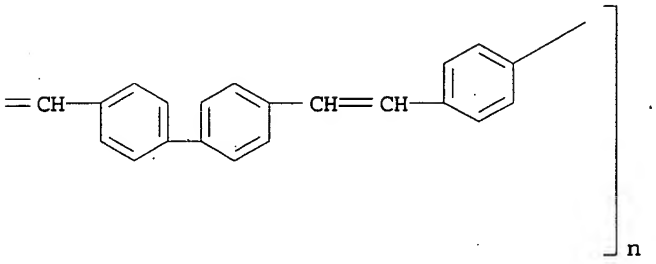


RN 848151-02-0 HCAPLUS
CN Poly[(phenylimino)-1,3-phenylene-1,2-ethynediyl(1,1,2,2-tetrahexyl-1,2-disilanediyl)-1,2-ethynediyl-1,3-phenylene(phenylimino)-1,4-phenylene-1,2-ethenediyl[1,1'-biphenyl]-4,4'-diyl-1,2-ethenediyl-1,4-phenylene] (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



IC ICM C08G077-60
ICS C08G061-12; H05B033-14; H05B033-22
CC 73-11 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
Section cross-reference(s): 38
IT 637356-40-2P 637356-41-3P 637356-42-4P 637356-43-5P
848150-97-0P 848150-98-1P **848151-01-9P**
848151-02-0P 848151-04-2P
RL: DEV (Device component use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)
(ethynylsilane copolymers useful as hole-transporting materials for organic electroluminescent devices)

L67 ANSWER 11 OF 26 HCAPLUS COPYRIGHT 2005 ACS on STN
2005:141139 Document No. 142:240878 Conjugated polymers containing dihydrophenanthrene units and their use. Becker, Heinrich; Breuning, Esther; Buesing, Arne; Falcou, Aurelie; Haase, Corinna; Speitzer, Hubert; Tuerk, Silke (Covion Organic Semiconductors G.m.b.H., Germany). PCT Int. Appl. WO 2005014689 A2 20050217, 45 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (German). CODEN: PIXXD2. APPLICATION: WO 2004-EP9019 20040812. PRIORITY: DE 2003-10337346 20030812.
AB The title polymers, useful in light-emitting diodes, contain dihydrophenanthrene units or their aza derivs. of specified structure. Stirring 9,10-bis(4-tert-butylphenyl)-9,10-dimethoxy-9,10-dihydrophenanthrene-2,7-diboronic acid bis(ethylene glycol) ester 2.0, 2,7-dibromo-9,10-bis(4-tert-butylphenyl)-9,10-dimethoxy-9,10-dihydrophenanthrene 0.8, N,N'-bis(4-bromophenyl)-N,N'-bis(4-tert-butylphenyl)benzidine 0.2, and [1-[(2-ethylhexyl)oxy]-4-methoxy-

2,5-bis(4-bromo-2,5-dimethoxystyryl]benzene 0.8 mmol (the prepns. of which are exemplified) with 8.8 mmol K3PO4 and PhMe 6, dioxane 19, and H2O 12 mL, 12 μmol (2-MeC6H4)3P, and 2 μmol Pd acetate at 87° for 20 min, adding 15 mL PhMe and, after 30 min, 12 mg 3,4-bis-2-methylbutoxy)benzeneboronic acid and after 60 min, 20 mg 3,4-bis(2-methylbutoxy)bromobenzene and refluxing for 1 h gave 95% yellow polymer with weight- and number-average mol. weight 207,000 and 58,000, resp.

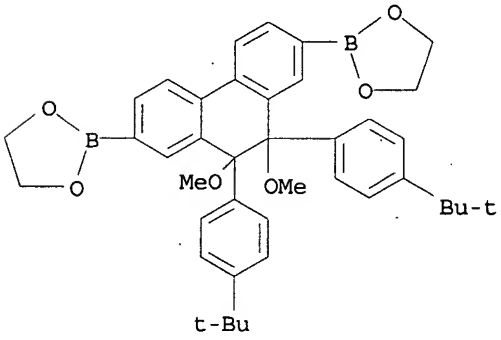
IT **844700-86-3P 844700-89-6P**
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(conjugated polymers containing dihydrophenanthrene units and their use)

RN 844700-86-3 HCAPLUS

CN [1,1'-Biphenyl]-4,4'-diamine, N,N'-bis(4-bromophenyl)-N,N'-bis[4-(1,1-dimethylethyl)phenyl]-, polymer with 1,4-bis[2-(4-bromo-2,5-dimethoxyphenyl)ethenyl]-2-[(2-ethylhexyl)oxy]-5-methoxybenzene, 2,2'-[9,10-bis[4-(1,1-dimethylethyl)phenyl]-9,10-dihydro-9,10-dimethoxy-2,7-phenanthrenediyl]bis[1,3,2-dioxaborolane] and 2,7-dibromo-9,10-bis[4-(1,1-dimethylethyl)phenyl]-9,10-dihydro-9,10-dimethoxyphenanthrene (9CI) (CA INDEX NAME)

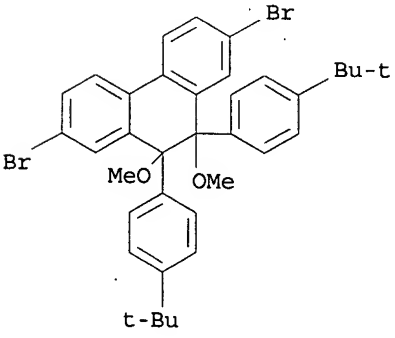
CM 1

CRN 844700-80-7
CMF C40 H46 B2 O6



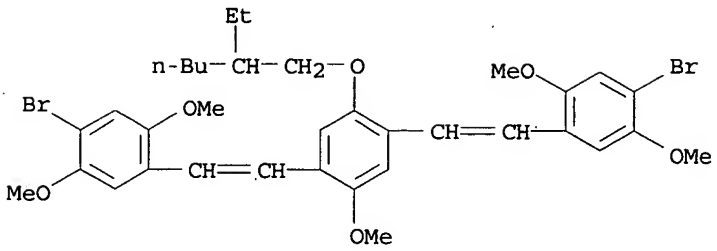
CM 2

CRN 844700-79-4
CMF C36 H38 Br2 O2



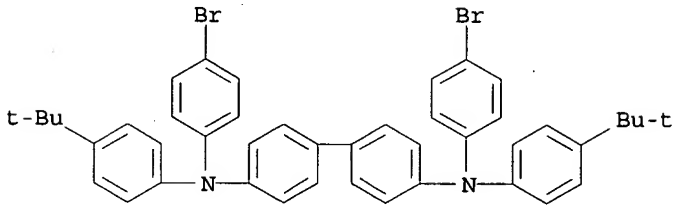
CM 3

CRN 501434-75-9
CMF C35 H42 Br2 O6



CM 4

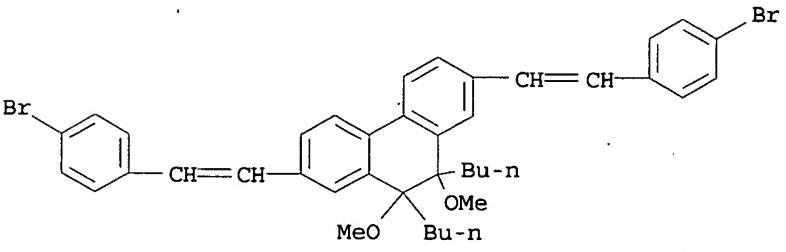
CRN 463944-36-7
CMF C44 H42 Br2 N2



RN 844700-89-6 HCAPLUS
CN [1,1'-Biphenyl]-4,4'-diamine, N,N'-bis(4-bromophenyl)-N,N'-bis[4-(1,1-dimethylethyl)phenyl]-, polymer with 2,7-bis[2-(4-bromophenyl)ethenyl]-9,10-dibutyl-9,10-dihydro-9,10-dimethoxyphenanthrene, 2',7'-dibromo-2,3,6,7-tetrakis(2-methylbutoxy)-9,9'-spirobi[9H-fluorene] and 2,2'-[2',3',6',7'-tetrakis(2-methylbutoxy)-9,9'-spirobi[9H-fluorene]-2,7-diyl]bis[1,3,2-dioxaborolane] (9CI) (CA INDEX NAME)

CM 1

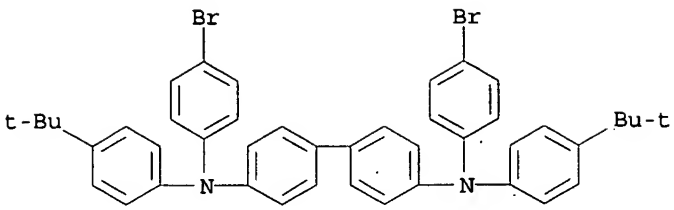
CRN 844700-84-1
CMF C40 H42 Br2 O2



CM 2

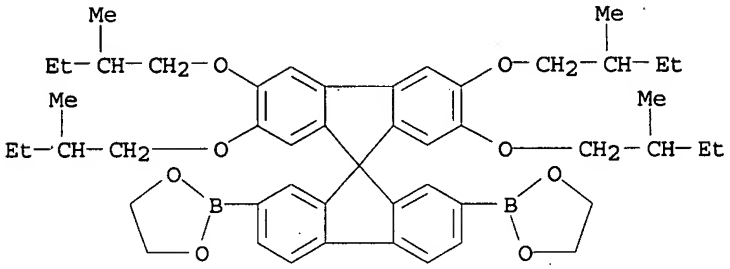
CRN 463944-36-7

CMF C44 H42 Br2 N2



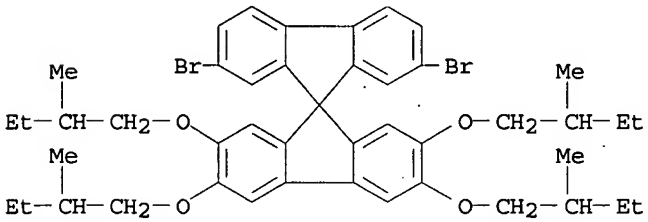
CM 3

CRN 396123-43-6
CMF C49 H62 B2 O8



CM 4

CRN 395059-23-1
CMF C45 H54 Br2 O4



IC ICM C08G061-00
ICS H01L051-30
CC 35-5 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 76
IT Field effect transistors
Integrated circuits
Semiconductor lasers
Solar cells
Thin **film transistors**
(**organic**; conjugated polymers containing dihydrophenanthrene units and their use)
IT **844700-86-3P** 844700-87-4P 844700-88-5P
844700-89-6P
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(conjugated polymers containing dihydrophenanthrene units and their

use)

L67 ANSWER 12 OF 26 HCAPLUS COPYRIGHT 2005 ACS on STN
2004:905274 Document No. 141:404357 Aryl amine polymer, thin film transistor using the aryl amine polymer, and method of manufacturing the thin film transistor. Sagisaka, Toshiya; Sasaki, Masaomi; Torii, Masafumi; Kawamura, Shinichi; Okada, Takashi; Nakayama, Yoshinobu; Akiyama, Yoshikazu; Kondoh, Hitoshi; Tomono, Hidenori; Yamaga, Takumi (Japan). U.S. Pat. Appl. Publ. US 2004212042 A1 20041028, 55 pp. (English). CODEN: USXXCO. APPLICATION: US 2004-777095 20040213. PRIORITY: JP 2003-35582 20030213; JP 2003-185402 20030627; JP 2003-307561 20030829; JP 2003-373723 20031031; JP 2004-24866 20040130; JP 2004-24867 20040130; JP 2004-24878 20040130; JP 2004-27234 20040203.

AB Polymers are described which comprise a repeat unit represented by -(-Ar2-N(Ar1)-Ar3-CH:CH-Ar4-CH:CH-)- (Ar1 = (un)substituted aromatic hydrocarbon group ; Ar2 and Ar3 = independently selected divalent aromatic hydrocarbons selected from (un)substituted monocyclic aromatic hydrocarbons, (un)substituted non-condensed polycyclic aromatic hydrocarbons and (un)substituted condensed polycyclic aromatic hydrocarbons; and Ar4 = a bivalent group of benzene, thiophene, biphenyl, or anthracene, each of which can optionally have a substituent). **Organic** thin **film transistors** are also described which comprise including a substrate, an organic semiconductor layer which contains a polymer as described above and is located overlying the substrate, an electrode pair of a source electrode and a drain electrode; and a third electrode. Methods of manufacturing**organic** thin-**film transistors** are described which entail applying a solution comprising a solvent and the polymer to the substrate; and drying the applied solution to form an organic layer on the substrate.

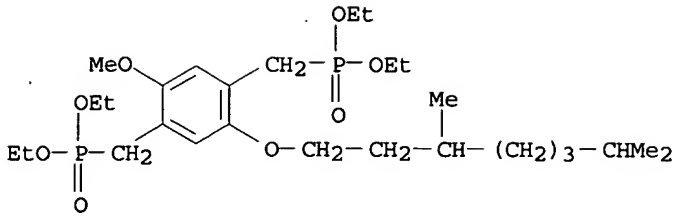
IT **645396-20-9DP**, phenyl- terminated **645396-21-0DP**, phenyl-terminated **645396-23-2DP**, phenyl- terminated **785808-10-8DP**, phenyl- terminated **785808-11-9DP**, benzaldehyde-terminated **785808-13-1DP**, phenyl- terminated **785808-15-3DP**, phenyl- terminated **785808-16-4DP**, phenyl- terminated **785808-17-5DP**, phenyl- terminated **785808-18-6DP**, phenyl- terminated **785808-19-7DP**, phenyl- terminated **785808-20-0DP**, phenyl- terminated **785808-22-2DP**, phenyl- terminated **785808-23-3DP**, phenyl- terminated **785808-24-4DP**, phenyl- terminated **785808-25-5DP**, phenyl- terminated **785808-27-7DP**, phenyl- terminated **785808-29-9DP**, phenyl- terminated **785808-31-3DP**, phenyl- terminated **785808-32-4P** **785808-33-5P** **785808-34-6P** **785808-35-7P** **785808-36-8P**
RL: DEV (Device component use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(aryl amine polymers and thin-film transistors using them and methods of manufacturing the transistors)

RN 645396-20-9 HCAPLUS

CN Phosphonic acid, [[2-methoxy-5-[(3,7-dimethyloctyl)oxy]-1,4-phenylene]bis(methylene)]bis-, tetraethyl ester, polymer with 4,4'-[(4-methylphenyl)imino]bis[benzaldehyde] (9CI) (CA INDEX NAME)

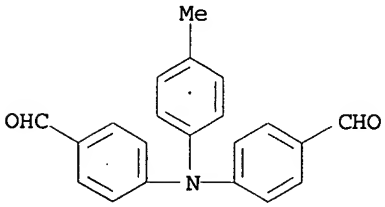
CM 1

CRN 287919-01-1
CMF C27 H50 O8 P2



CM 2

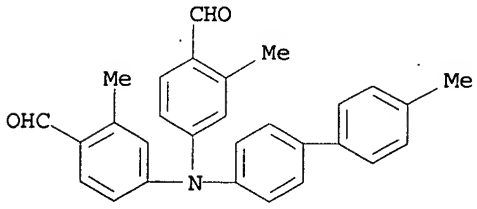
CRN 122112-54-3
CMF C21 H17 N O2



RN 645396-21-0 HCAPLUS
CN Phosphonic acid, [[2-methoxy-5-[(3,7-dimethyloctyl)oxy]-1,4-phenylene]bis(methylene)]bis-, tetraethyl ester, polymer with 4,4'-[(4'-methyl[1,1'-biphenyl]-4-yl)imino]bis[2-methylbenzaldehyde] (9CI) (CA INDEX NAME)

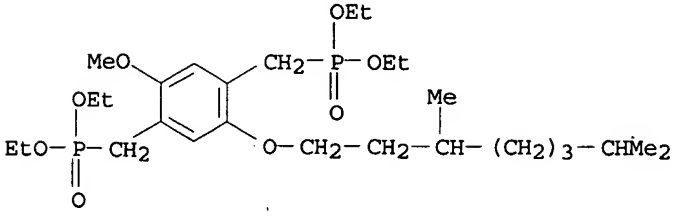
CM 1

CRN 454703-89-0
CMF C29 H25 N O2



CM 2

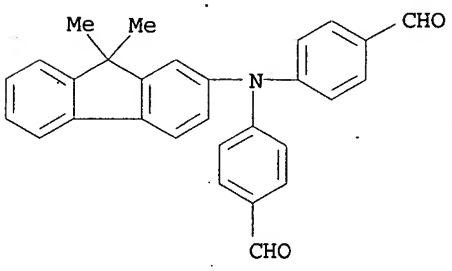
CRN 287919-01-1
CMF C27 H50 O8 P2



RN 645396-23-2 HCAPLUS
CN Phosphonic acid, [[2-methoxy-5-[(3,7-dimethyloctyl)oxy]-1,4-phenylene]bis(methylene)]bis-, tetraethyl ester, polymer with 4,4'-[(9,9-dimethyl-9H-fluoren-2-yl)imino]bis[benzaldehyde] (9CI) (CA INDEX NAME)

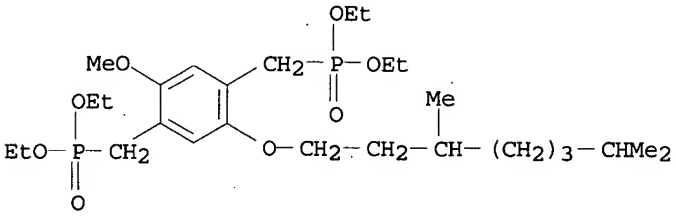
CM 1

CRN 645396-22-1
CMF C29 H23 N O2



CM 2

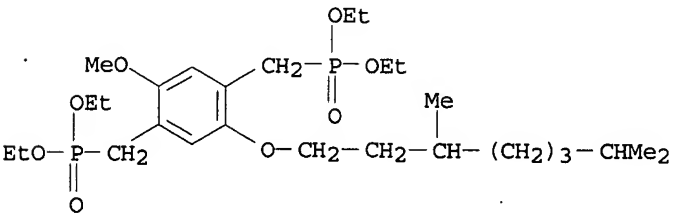
CRN 287919-01-1
CMF C27 H50 O8 P2



RN 785808-10-8 HCAPLUS
CN Phosphonic acid, [[2-methoxy-5-[(3,7-dimethyloctyl)oxy]-1,4-phenylene]bis(methylene)]bis-, tetraethyl ester, polymer with 4,4'-(phenylimino)bis[benzaldehyde] (9CI) (CA INDEX NAME)

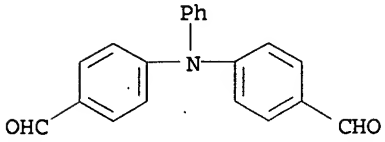
CM 1

CRN 287919-01-1
CMF C27 H50 O8 P2



CM 2

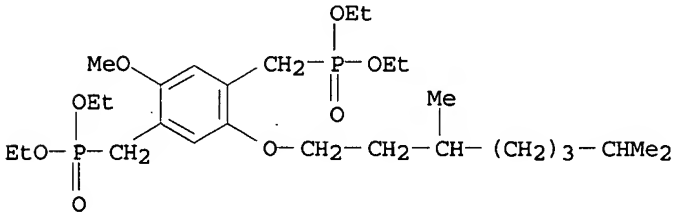
CRN 53566-95-3
CMF C20 H15 N O2



RN 785808-11-9 HCAPLUS
CN Phosphonic acid, [[2-methoxy-5-[(3,7-dimethyloctyl)oxy]-1,4-phenylene]bis(methylene)]bis-, tetraethyl ester, polymer with 4,4'-[(3,4-dimethylphenyl)imino]bis[benzaldehyde] (9CI) (CA INDEX NAME)

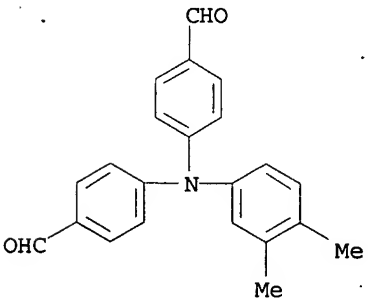
CM 1

CRN 287919-01-1
CMF C27 H50 O8 P2



CM 2

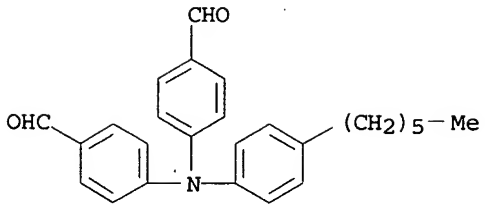
CRN 149676-14-2
CMF C22 H19 N O2



RN 785808-13-1 HCAPLUS
CN Phosphonic acid, [(2,5-dimethoxy-1,4-phenylene)bis(methylene)]bis-, tetraethyl ester, polymer with 4,4'-[(4-hexylphenyl)imino]bis[benzaldehyde] (9CI) (CA INDEX NAME)

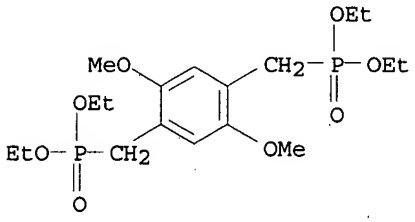
CM 1

CRN 785808-12-0
CMF C26 H27 N O2



CM 2

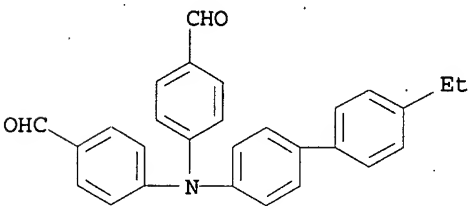
CRN 60491-94-3
CMF C18 H32 O8 P2



RN 785808-15-3 HCAPLUS
CN Phosphonic acid, [[2-methoxy-5-[(3,7-dimethyloctyl)oxy]-1,4-phenylene]bis(methylene)]bis-, tetraethyl ester, polymer with 4,4'-[(4'-ethyl[1,1'-biphenyl]-4-yl)imino]bis[benzaldehyde] (9CI) (CA INDEX NAME)

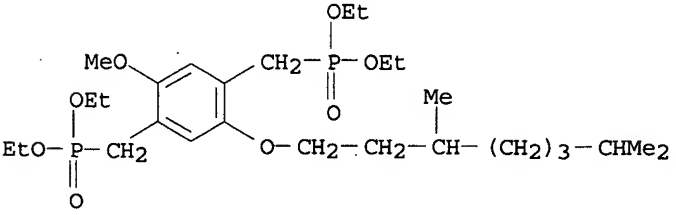
CM 1

CRN 785808-14-2
CMF C28 H23 N O2



CM 2

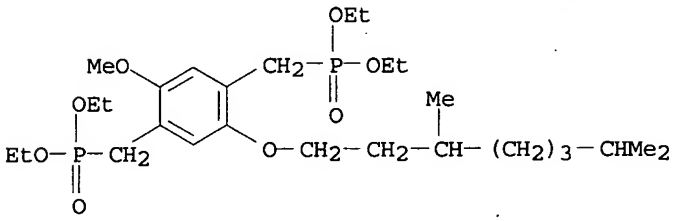
CRN 287919-01-1
CMF C27 H50 O8 P2



RN 785808-16-4 HCAPLUS
CN Phosphonic acid, [[2-methoxy-5-[(3,7-dimethyloctyl)oxy]-1,4-phenylene]bis(methylene)]bis-, tetraethyl ester, polymer with 4,4'-[(2,4-dimethylphenyl)imino]bis[benzaldehyde] (9CI) (CA INDEX NAME)

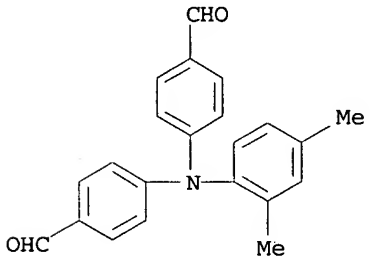
CM 1

CRN 287919-01-1
CMF C27 H50 O8 P2



CM 2

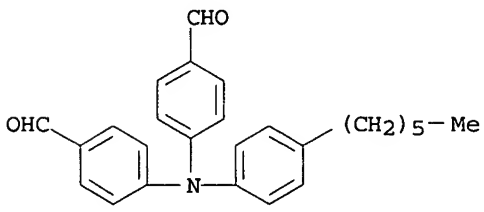
CRN 149676-06-2
CMF C22 H19 N O2



RN 785808-17-5 HCAPLUS
CN Phosphonic acid, [[2-methoxy-5-[(3,7-dimethyloctyl)oxy]-1,4-phenylene]bis(methylene)]bis-, tetraethyl ester, polymer with 4,4'-[(4-hexylphenyl)imino]bis[benzaldehyde] (9CI) (CA INDEX NAME)

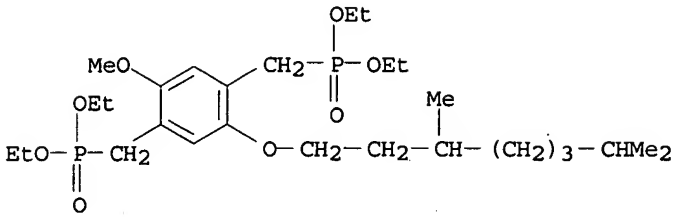
CM 1

CRN 785808-12-0
CMF C26 H27 N O2



CM 2

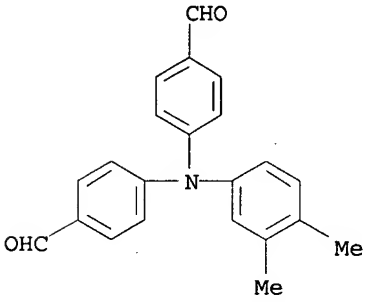
CRN 287919-01-1
CMF C27 H50 O8 P2



RN 785808-18-6 HCAPLUS
CN Phosphonic acid, [1,4-phenylenebis(methylene)]bis-, tetraethyl ester, polymer with 4,4'-[(3,4-dimethylphenyl)imino]bis[benzaldehyde] (9CI) (CA INDEX NAME)

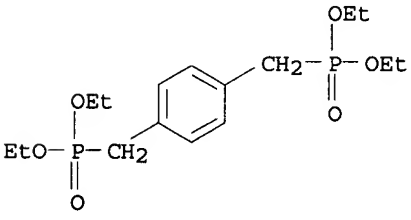
CM 1

CRN 149676-14-2
CMF C22 H19 N O2



CM 2

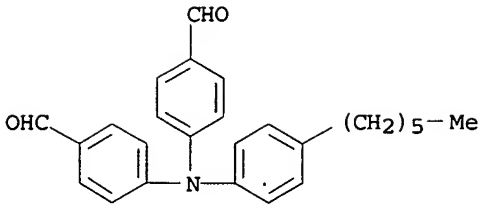
CRN 4546-04-7
CMF C16 H28 O6 P2



RN 785808-19-7 HCAPLUS
CN Phosphonic acid, [9,10-anthracenediylbis(methylene)]bis-, tetraethyl ester, polymer with 4,4'-[(4-hexylphenyl)imino]bis[benzaldehyde] (9CI) (CA INDEX NAME)

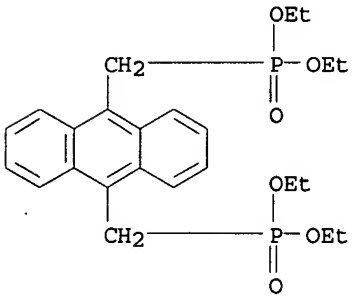
CM 1

CRN 785808-12-0
CMF C26 H27 N O2



CM 2

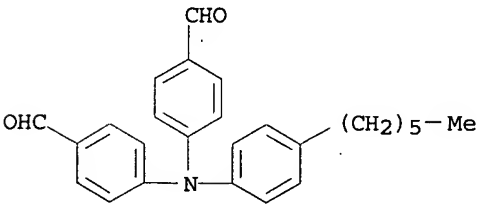
CRN 60974-92-7
CMF C24 H32 O6 P2



RN 785808-20-0 HCAPLUS
CN Phosphonic acid, [[1,1'-biphenyl]-4,4'-diylbis(methylene)]bis-, tetraethyl ester, polymer with 4,4'-[(4-hexylphenyl)imino]bis[benzaldehyde] (9CI) (CA INDEX NAME)

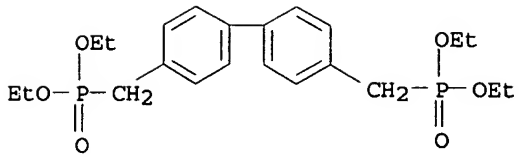
CM 1

CRN 785808-12-0
CMF C26 H27 N O2



CM 2

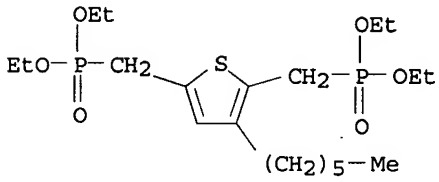
CRN 17919-34-5
CMF C22 H32 O6 P2



RN 785808-22-2 HCAPLUS
CN Phosphonic acid, [(3-hexyl-2,5-thiophenediyl)bis(methylene)]bis-, tetraethyl ester, polymer with 4,4'-[(4-methylphenyl)imino]bis[benzaldehyde] (9CI) (CA INDEX NAME)

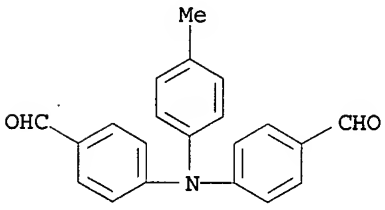
CM 1

CRN 785808-21-1
CMF C20 H38 O6 P2 S



CM 2

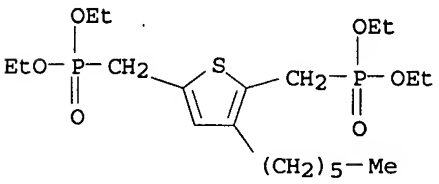
CRN 122112-54-3
CMF C21 H17 N O2



RN 785808-23-3 HCAPLUS
CN Phosphonic acid, [(3-hexyl-2,5-thiophenediyl)bis(methylene)]bis-, tetraethyl ester, polymer with 4,4'-[(4-hexylphenyl)imino]bis[benzaldehyde] (9CI) (CA INDEX NAME)

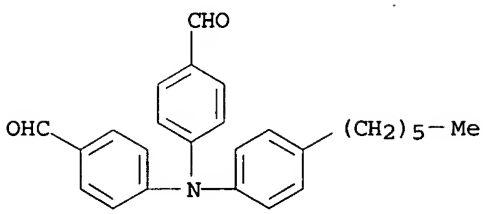
CM 1

CRN 785808-21-1
CMF C20 H38 O6 P2 S



CM 2

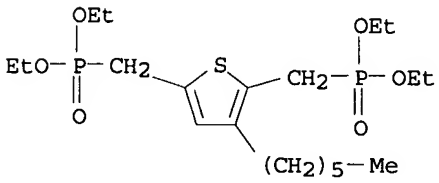
CRN 785808-12-0
CMF C26 H27 N O2



RN 785808-24-4 HCAPLUS
CN Phosphonic acid, [(3-hexyl-2,5-thiophenediyl)bis(methylene)]bis-, tetraethyl ester, polymer with 4,4'-[(9,9-dimethyl-9H-fluoren-2-yl)imino]bis[benzaldehyde] (9CI) (CA INDEX NAME)

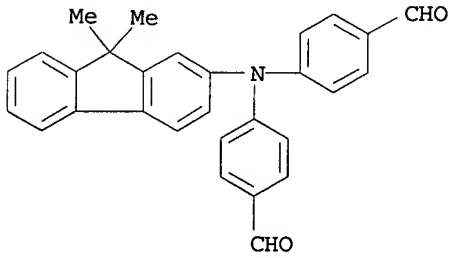
CM 1

CRN 785808-21-1
CMF C20 H38 O6 P2 S



CM 2

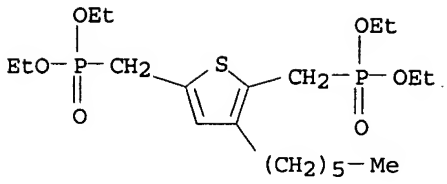
CRN 645396-22-1
CMF C29 H23 N O2



RN 785808-25-5 HCAPLUS
CN Phosphonic acid, [(3-hexyl-2,5-thiophenediyl)bis(methylene)]bis-, tetraethyl ester, polymer with 4;4'-[(4'-methyl[1,1'-biphenyl]-4-yl)imino]bis[2-methylbenzaldehyde] (9CI) (CA INDEX NAME)

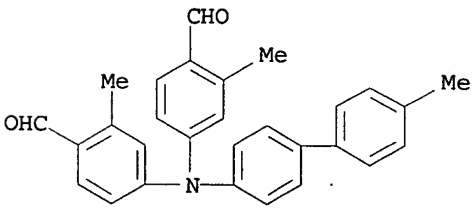
CM 1

CRN 785808-21-1
CMF C20 H38 O6 P2 S



CM 2

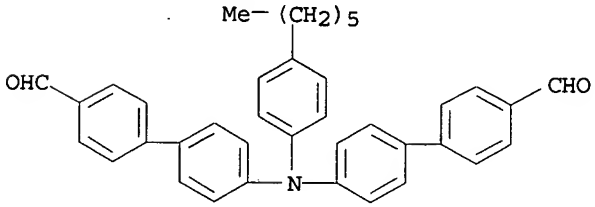
CRN 454703-89-0
CMF C29 H25 N O2



RN 785808-27-7 HCAPLUS
CN Phosphonic acid, [1,4-phenylenebis(methylene)]bis-, tetraethyl ester, polymer with 4,4'-[(4-hexylphenyl)imino]bis[[1,1'-biphenyl]-4-carboxaldehyde] (9CI) (CA INDEX NAME)

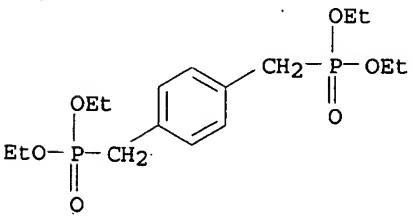
CM 1

CRN 785808-26-6
CMF C38 H35 N O2



CM 2

CRN 4546-04-7
CMF C16 H28 O6 P2

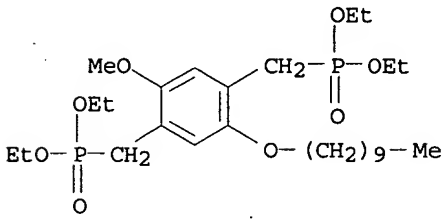


RN 785808-29-9 HCAPLUS

CN Phosphonic acid, [[2-(decyloxy)-5-methoxy-1,4-phenylene]bis(methylene)]bis-, tetraethyl ester, polymer with 4',4'''-[(4-hexylphenyl)imino]bis[[1,1'-biphenyl]-4-carboxaldehyde] (9CI) (CA INDEX NAME)

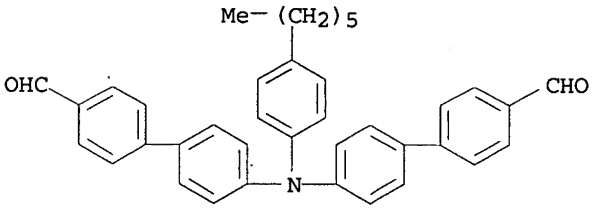
CM 1

CRN 785808-28-8
CMF C27 H50 O8 P2



CM 2

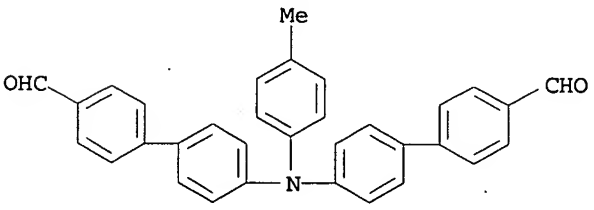
CRN 785808-26-6
CMF C38 H35 N O2



RN 785808-31-3 HCAPLUS
CN Phosphonic acid, [[2-(decyloxy)-5-methoxy-1,4-phenylene]bis(methylene)]bis-, tetraethyl ester, polymer with 4',4'''-[(4-methylphenyl)imino]bis[[1,1'-biphenyl]-4-carboxaldehyde] (9CI) (CA INDEX NAME)

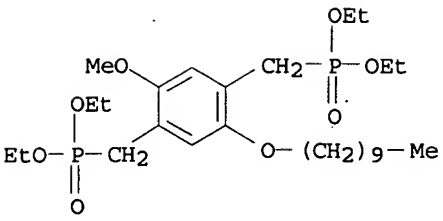
CM 1

CRN 785808-30-2
CMF C33 H25 N O2



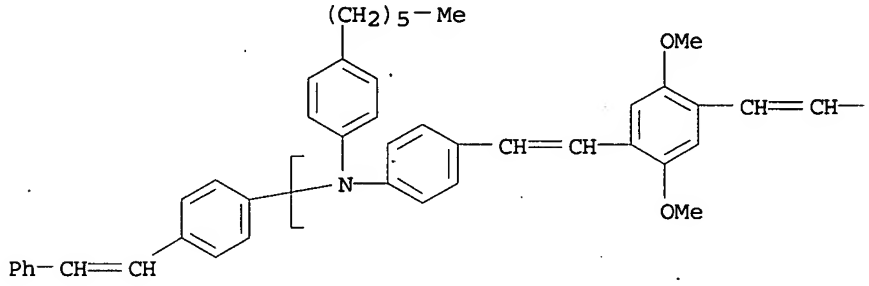
CM 2

CRN 785808-28-8
CMF C27 H50 O8 P2

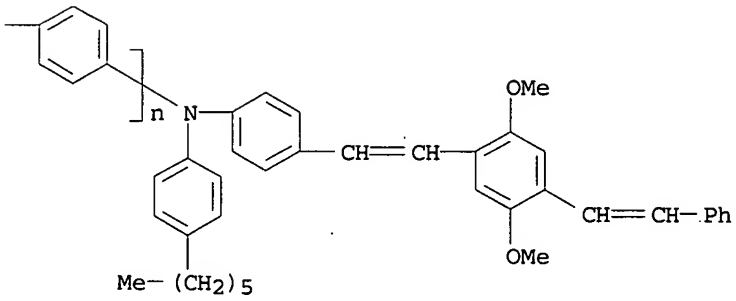


RN 785808-32-4 HCAPLUS
CN Poly[[(4-hexylphenyl)imino]-1,4-phenylene-1,2-ethenediyl(2,5-dimethoxy-1,4-phenylene)-1,2-ethenediyl-1,4-phenylene], α-[4-(2-phenylethenyl)phenyl]ω-[[4-[2-[2,5-dimethoxy-4-(2-phenylethenyl)phenyl]ethenyl]phenyl](4-hexylphenyl)amino]- (9CI) (CA INDEX NAME)

PAGE 1-A

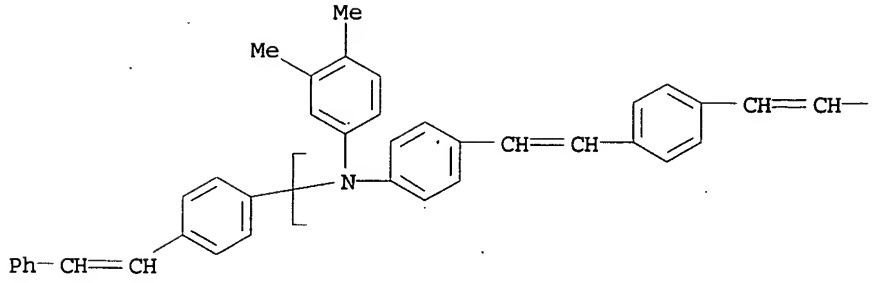


PAGE 1-B

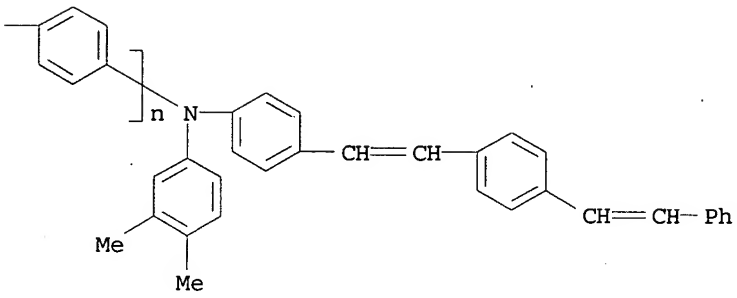


RN 785808-33-5 HCAPLUS
CN Poly[[(3,4-dimethylphenyl)imino]-1,4-phenylene-1,2-ethenediyl-1,4-phenylene-1,2-ethenediyl-1,4-phenylene],α-[4-(2-phenylethenyl)phenyl]ω-[(3,4-dimethylphenyl)[4-[2-[4-(2-phenylethenyl)phenyl]ethenyl]phenyl]amino]- (9CI) (CA INDEX NAME)

PAGE 1-A

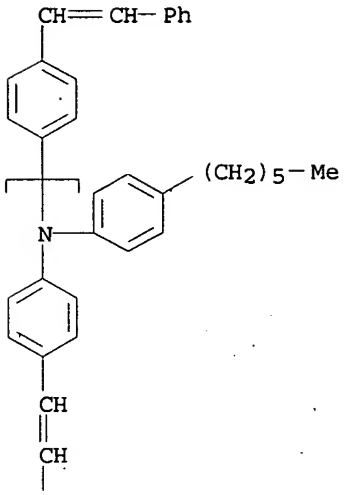


PAGE 1-B

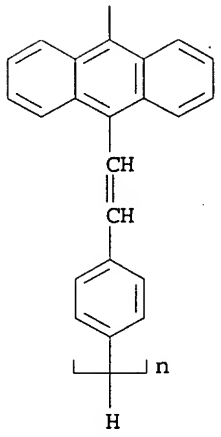


RN 785808-34-6 HCAPLUS
CN Poly[[(4-hexylphenyl)imino]-1,4-phenylene-1,2-ethenediyl-9,10-anthracenediyl-1,2-ethenediyl-1,4-phenylene],α-[4-(2-phenylethenyl)phenyl]ω-hydro- (9CI) (CA INDEX NAME)

PAGE 1-A

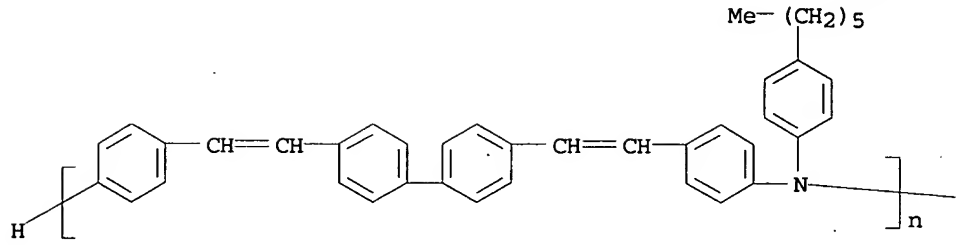


PAGE 2-A

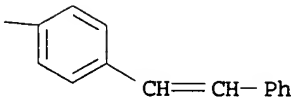


RN 785808-35-7 HCAPLUS
CN Poly[[(4-hexylphenyl)imino]-1,4-phenylene-1,2-ethenediyl[1,1'-biphenyl]-4,4'-diyl-1,2-ethenediyl-1,4-phenylene], α-[4-(2-phenylethenyl)phenyl]ω-hydro- (9CI) (CA INDEX NAME)

PAGE 1-A

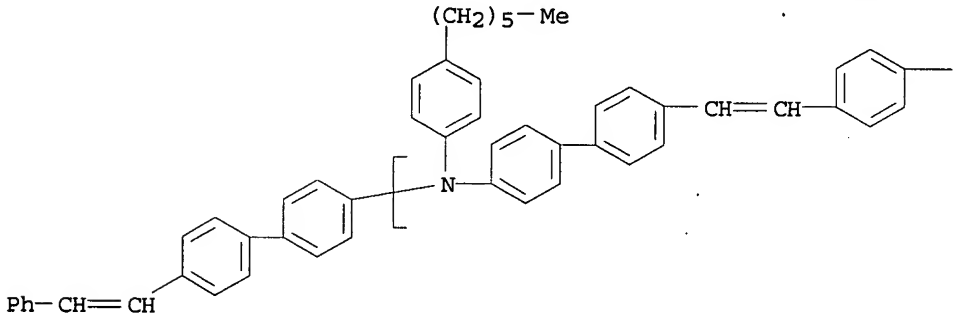


PAGE 1-B

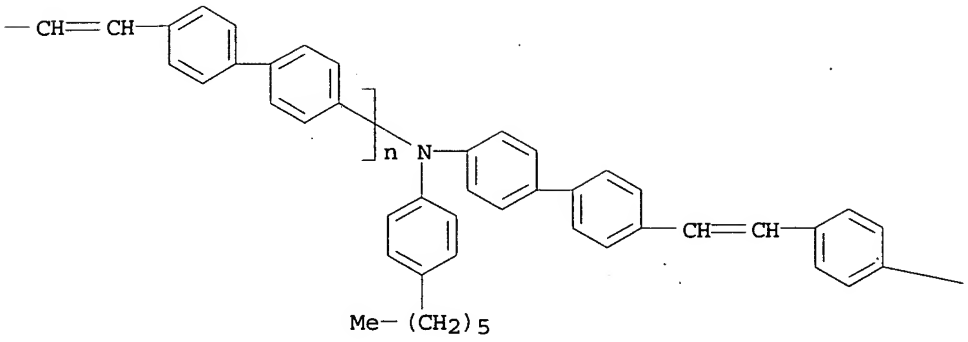


RN 785808-36-8 HCAPLUS
CN Poly[[(4-hexylphenyl)imino][1,1'-biphenyl]-4,4'-diyl-1,2-ethenediyl-1,4-phenylene-1,2-ethenediyl[1,1'-biphenyl]-4,4'-diyl], α-[4'-(2-phenylethenyl)[1,1'-biphenyl]-4-yl]ω-[(4-hexylphenyl)[4'-[2-[4-(2-phenylethenyl)phenyl]ethenyl][1,1'-biphenyl]-4-yl]amino]- (9CI) (CA INDEX NAME)

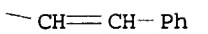
PAGE 1-A



PAGE 1-B



PAGE 1-C



IC ICM H01L029-72
ICS C08G083-00
INCL 257552000; 525534000
CC 76-3 (Electric Phenomena)
Section cross-reference(s): 38
IT Thin **film transistors**
(**organic**; aryl amine polymers and thin-film transistors using them and methods of manufacturing the transistors)
IT **645396-20-9DP**, phenyl- terminated **645396-21-0DP**, phenyl-terminated **645396-23-2DP**, phenyl- terminated **785808-10-8DP**, phenyl- terminated **785808-11-9DP**, benzaldehyde-terminated **785808-13-1DP**, phenyl- terminated **785808-15-3DP**, phenyl- terminated **785808-16-4DP**, phenyl- terminated **785808-17-5DP**, phenyl- terminated **785808-18-6DP**, phenyl- terminated **785808-19-7DP**, phenyl- terminated **785808-20-0DP**, phenyl- terminated **785808-22-2DP**, phenyl- terminated **785808-23-3DP**, phenyl- terminated **785808-24-4DP**, phenyl- terminated **785808-25-5DP**, phenyl- terminated **785808-27-7DP**, phenyl- terminated **785808-29-9DP**, phenyl- terminated **785808-31-3DP**, phenyl- terminated **785808-32-4P** **785808-33-5P** **785808-34-6P** **785808-35-7P** **785808-36-8P** 785828-74-2P 785828-75-3P 785831-97-2P 785833-67-2P 785834-13-1P 785834-16-4P 785834-17-5P 785834-19-7P 785834-25-5P 785834-26-6P 785834-28-8P 785834-29-9P 785834-44-8P 785834-51-7P
RL: DEV (Device component use); SPN (Synthetic preparation); PREP

(Preparation); USES (Uses)
(aryl amine polymers and thin-film transistors using them and methods of manufacturing the transistors)

L67 ANSWER 13 OF 26 HCAPLUS COPYRIGHT 2005 ACS on STN
2004:802399 Document No. 141:322519 Electrophotographic photoreceptor comprising mixtures of charge transfer compounds. Sakimura, Tomoko; Shibata, Toyoko (Konica Minolta Holdings, Inc., Japan). U.S. Pat. Appl. Publ. US 2004191654 A1 20040930, 55 pp. (English). CODEN: USXXCO. APPLICATION: US 2004-805962 20040322. PRIORITY: JP 2003-93896 20030331; JP 2003-93897 20030331; JP 2003-144707 20030522; JP 2003-304318 20030828.

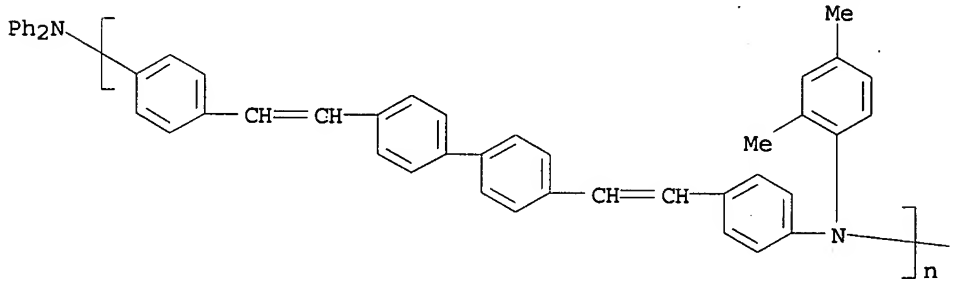
AB An electrophotog. photoreceptor comprising a support and a photosensitive layer is disclosed. The photosensitive layer contains a mixture of compds. represented by Formula (1): X-(CTM)n-Y (CTM = charge transfer group; X, Y = H, halogen, mono-valent organic group; n = 0-10; provided that n = 1-10, when both X and Y are hydrogen atom or a halogen atom); and with condition of (Rp+Rs) ≤ 99%, Rp = ratio of a component having the maximum content in the mixture and Rs = ratio of a component having the content next to the maximum content in %. A processing cartridge comprising the electrophotog. photoreceptor is also disclosed. The object of the invention is to prevent the defects of the image caused by the decrease of the sensitivity, which tends to occur in the course of high speed copying or copying under a low temperature and low humidity condition, by the lowering of the sharpness of the image accompanying the decreasing of image d. and thinning of character image caused by the charge fluctuation of the solid black image area.

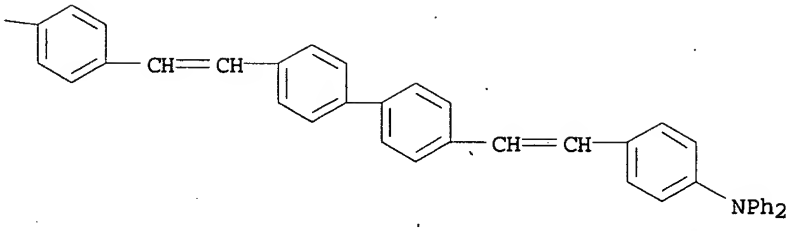
IT **767336-14-1**
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(electrophotog. photoreceptor comprising mixts. of charge transfer compds.)

RN 767336-14-1 HCAPLUS

CN Poly[[(2,4-dimethylphenyl)imino]-1,4-phenylene-1,2-ethenediyl[1,1'-biphenyl]-4,4'-diyl-1,2-ethenediyl-1,4-phenylene], α-[4-[2-[4'-[2-[4-(diphenylamino)phenyl]ethenyl][1,1'-biphenyl]-4-yl]ethenyl]phenyl]ω-(diphenylamino)- (9CI) (CA INDEX NAME)

PAGE 1-A



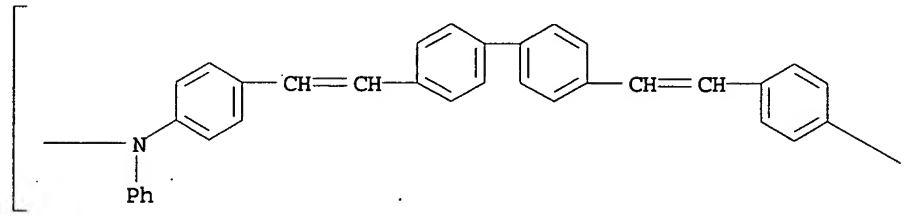


IC ICM G03G005-06
INCL 430058050; 430073000; 430058850
CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT 767336-04-9 767336-05-0 767336-06-1 767336-07-2 767336-08-3
767336-09-4 767336-10-7 767336-11-8 767336-12-9 767336-13-0
767336-14-1 767336-15-2 767336-16-3 767336-17-4
767336-18-5 767336-19-6 767336-20-9 767336-21-0
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(electrophotog. photoreceptor comprising mixts. of charge transfer compds.)

L67 ANSWER 14 OF 26 HCAPLUS COPYRIGHT 2005 ACS on STN
2003:388870 Document No. 139:117754 Synthesis and photophysical properties of alternating copolymers containing triphenylamine moieties. Huang, Hongmin; He, Qingguo; Song, Yan; Lin, Hongzhen; Yang, Junlin; Bai, Fenglian (Laboratory of Organic Solids, Center for Molecular Science, Institute of Chemistry, Chinese Academy of Sciences, Beijing, 100080, Peop. Rep. China). Polymers for Advanced Technologies, 14(3-5), 309-313 (English) 2003. CODEN: PADTE5. ISSN: 1042-7147. Publisher: John Wiley & Sons Ltd..
AB Two alternating copolymers containing triphenylamine and biphenyl or fluorene, poly[triphenylamine-alt-biphenylene vinylene] (TPA-PBPV) and poly[triphenylamine-alt-2,7-fluorenenylene vinylene] (TPA-FLV) were synthesized by means of the Wittig reaction. Both the polymers show good solubility in common organic solvents and excellent film-forming ability. Thermogravimetric anal. investigation demonstrates that the polymers have high thermal stability, the degradation temperature of TPA-FLV is as high as 499.0°. Differential scanning calorimetry results indicate that the glass transition temperature of poly TPA-FLV is higher than 200°, much higher than that of PBPV-TPA, which might be a merit for the long-life operation of light-emitting devices. The photophys. properties of the polymers were investigated in both CH2Cl2 solution and spin-coated film, photoluminescence efficiencies are also determined, PFV-TPA has a higher efficiency, which may make it a more promising candidate for light-emitting materials.
IT **149675-71-8P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(synthesis and photophys. properties of alternating copolymers containing triphenylamine moieties)
RN 149675-71-8 HCAPLUS

CN Poly[(phenylimino)-1,4-phenylene-1,2-ethenediyl[1,1'-biphenyl]-4,4'-diyl-1,2-ethenediyl-1,4-phenylene] (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

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CC 35-5 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 73

IT **149675-71-8P** 561328-75-4P 561328-76-5P 561328-77-6P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(synthesis and photophys. properties of alternating copolymers containing triphenylamine moieties)

L67 ANSWER 15 OF 26 HCAPLUS COPYRIGHT 2005 ACS on STN

2003:317543 Document No. 138:346221 Organic electroluminesence device. Nukada, Katsumi; Yamada, Wataru (Fuji Xerox Co., Ltd., Japan). Eur. Pat. Appl. EP 1304750 A2 20030423, 41 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK. (English). CODEN: EPXXDW. APPLICATION: EP 2002-23079 20021017. PRIORITY: JP 2001-320511 20011018; JP 2002-266704 20020912.

AB Organic electroluminescent devices comprising ubstrate and organic film layers formed on the surface of the substrate so that they are held by an anode and a cathode are described in which≥1 of the organic film layers is a layer comprising a cross-linked cured film containing compds. having a substituted silicon group having the hydrolysable group, or a derivative thereof, and≥1 of the compds. having a substituted silicon group having a hydrolysable group is a compound represented by the formula F-[Dc-Si(R)(3-a)Qa]b (F = an organic group derived from a photofunctional compound; D = a divalent tethering group; R = H, an alkyl group, or an (un)substituted aryl group; Q = a hydrolysable group; a = 1 or 2; b = 1-4, and c = 0 or 1). The use of solution coating to produce the devices is discussed.

IT **515136-43-3P**
RL: DEV (Device component use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(organic electroluminesent devices with crosslinked siloxane-containing layers)

RN 515136-43-3 HCAPLUS

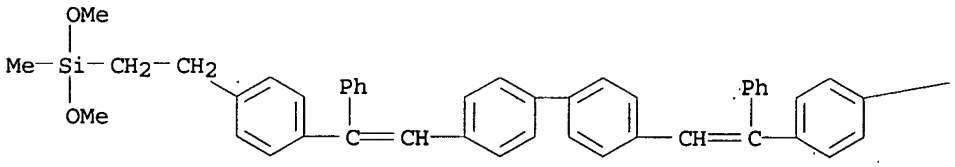
CN [1,1'-Biphenyl]-4,4'-diamine, N,N'-bis[4-[2-(diethoxymethylsilyl)ethyl]phenyl]-N,N'-bis(3,4-dimethylphenyl)-3,3'-

dimethyl-, polymer with [[1,1'-biphenyl]-4,4'-diylbis[(1-phenyl-2,1-ethenediyl)-4,1-phenylene-2,1-ethanediyl]]bis[dimethoxymethylsilane] (9CI) (CA INDEX NAME)

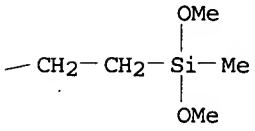
CM 1

CRN 515136-42-2
CMF C50 H54 O4 Si2

PAGE 1-A

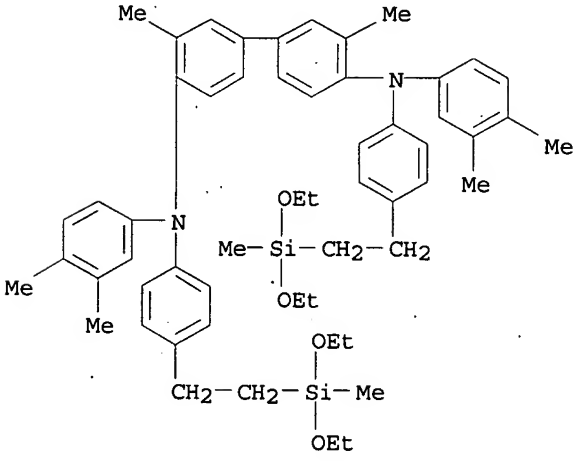


PAGE 1-B



CM 2

CRN 515136-41-1
CMF C56 H72 N2 O4 Si2



IC ICM H01L051-30
CC 73-11 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
Section cross-reference(s): 76
IT 515136-40-0P **515136-43-3P** 515136-44-4P
RL: DEV (Device component use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(organic electroluminesent devices with crosslinked siloxane-containing layers)

L67 ANSWER 16 OF 26 HCAPLUS COPYRIGHT 2005 ACS on STN
2001:895587 Document No. 136:45407 Electroluminescent devices having arylamine polymers. Shi, Jianmin; Zheng, Shiying (Eastman Kodak Company, USA). U.S. US 6329086 B1 20011211, 32 pp. (English). CODEN: USXXAM. APPLICATION: US 2000-593127 20000613.

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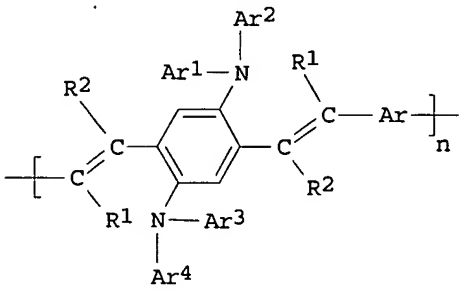


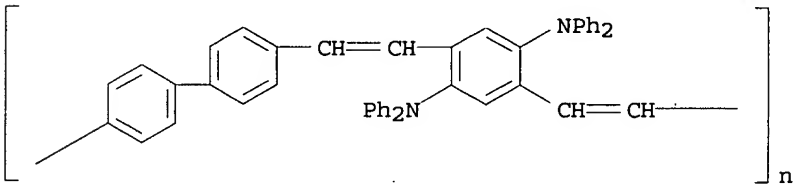
I

AB Electroluminescent devices which include an anode, a cathode, and a polymer luminescent material disposed between the anode and cathode are described in which the polymer luminescent material includes arylamine moiety are described by the general formula I (R1 and R2 = independently selected H, C1-24 alkyl, C6-40 (un)substituted aryl, C4-40 (un)substituted heteroaryl, or cyano groups; and Ar, Ar1-4 = independently selected C6-40 (un)substituted aryl; and/or C4-40 (un)substituted heteroaryl groups). The polymer luminescent material may be doped with ≥1 fluorescent dyes or other light-emitting materials.

IT **380498-77-1P**
RL: DEV (Device component use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(electroluminescent devices using arylamine polymers)

RN 380498-77-1 HCAPLUS

CN Poly[[1,1'-biphenyl]-4,4'-diyl-1,2-ethenediyl[2,5-bis(diphenylamino)-1,4-phenylene]-1,2-ethenediyl] (9CI) (CA INDEX NAME)



IC ICM H05B033-14
INCL 428690000
CC 73-11 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
Section cross-reference(s): 38, 76

IT 369370-71-8P 369370-72-9P 369385-63-7P 380498-76-0P
380498-77-1P 380498-78-2P 380498-79-3P 380498-80-6P
380498-81-7P 380643-48-1P
RL: DEV (Device component use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(electroluminescent devices using arylamine polymers)

L67 ANSWER 17 OF 26 HCAPLUS COPYRIGHT 2005 ACS on STN
2001:516495 Document No. 135:233749 Photoinduced Electron-Transfer from Mono-/Oligo-1,4-phenylenevinylenes Containing Aromatic Amines

to C60/C70 and Electron-Mediating Process to Viologen Dication in Polar Solution. Onodera, Hitoshi; Araki, Yasuyuki; Fujitsuka, Mamoru; Onodera, Shinji; Ito, Osamu; Bai, Fenglian; Zheng, Min; Yang, Jun-Lin (Institute of Multidisciplinary Research for Advanced Materials, Tohoku University CREST Japan Science and Technology Corporation, Katahira Aoba-ku Sendai, 980-8577, Japan). Journal of Physical Chemistry A, 105(31), 7341-7349 (English) 2001. CODEN: JPCAFH. ISSN: 1089-5639. Publisher: American Chemical Society.

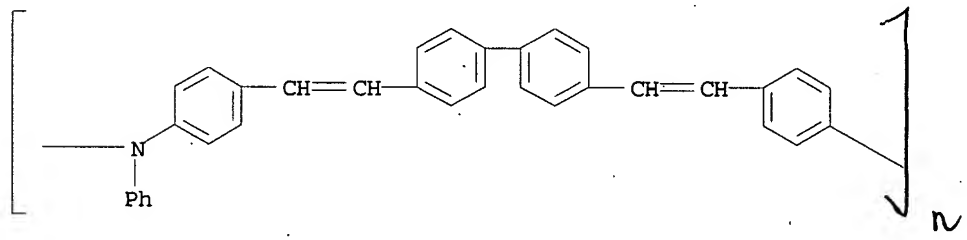
AB Photoinduced electron-transfer processes of C60 and C70 from alternating oligomers of phenylenevinylene derivs. (oligo(PV) derivs.) containing triphenylamine (TPA) or carbazole (Cz) and their monomer models (mono(PV) derivs.) in polar solvent have been investigated by nanosecond laser photolysis method with the observation of the transient absorption bands in the visible and near-IR regions. The transient species relating to the electron-transfer processes such as the triplet states of C60/C70 (3C60*/3C70*), radical anions of C60/C70 (C6•-/C70•-), and the radical cations of oligo(PV) derivs. and mono(PV) derivs. were detected in the region of 400-1600 nm. From their decays and rises, it is revealed that the electron-transfer process takes place via 3C60*/3C70* in polar solvent. The transient absorption bands of the radical cations of the PV derivs. revealed the delocalization of the radical-cation center (hole) along the PV backbone containing aromatic amines. In longer time scale, back electron transfer takes place from C6C•-/C70•- to the radical cations of mono(PV)/oligo(PV) derivs.; the back electron-transfer rate consts. for oligo(PV) derivs. were smaller than those for mono(PV) derivs. In the presence of octyl viologen dication (OV2+), the electron of C60•- further transfers to OV2+, yielding the viologen radical cation (OV•+), which prolongs the lifetimes of the cation radicals of mono(PV) and oligo(PV) derivs. Although an accumulation of OV•+ was observed for the C60/mono(PV)/OV2+ system, an almost completely reversible photosensitized electron-transfer/electron-mediating cycle was observed for C60/oligo(PV)/OV2+.

IT **149675-71-8**
RL: PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process)
(photolysis study of electron-transfer from phenylenevinylenes to fullerenes in presence and absence of viologen dication)

RN 149675-71-8 HCAPLUS

CN Poly[(phenylimino)-1,4-phenylene-1,2-ethenediyl[1,1'-biphenyl]-4,4'-diyl-1,2-ethenediyl-1,4-phenylene] (9CI) (CA INDEX NAME)

PAGE 1-A



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]n

CC 74-1 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT 2607-41-2 55035-42-2 66620-94-8 99685-96-8, C60 fullerene 115383-22-7, C70 fullerene 138184-36-8, meh-ppv 138685-19-5 144810-08-2 **149675-71-8** 240489-91-2 252349-54-5 265126-14-5 265126-17-8
RL: PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process)
(photolysis study of electron-transfer from phenylenevinylenes to fullerenes in presence and absence of viologen dication)

L67 ANSWER 18 OF 26 HCAPLUS COPYRIGHT 2005 ACS on STN

2000:723659 Document No. 133:328334 Multi-component multiphase type polymer material and its use in functional element.. Hiraoka, Toshiro; Asakawa, Koji (Toshiba Corp., Japan). Jpn. Kokai Tokkyo Koho JP 2000286479 A2 20001013, 26 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1999-87094 19990329.

AB The polymer material has 3-dimensionally continuous nanophase separation structure and comprises phase A which is an aggregate of hole- or electron-conductive polymer chain and phase B which is an aggregate of another hole- or electron conductive polymer chain, and the two phases are chemical bonded at the interfaces. The functional element comprises the above material sandwiched between a pair of electrode. Preferably, the polymer material is A-B or B-A-B type block copolymers. The functional elements are useful in solar cells, photoelec. converters, capacitors, and other electronic devices.

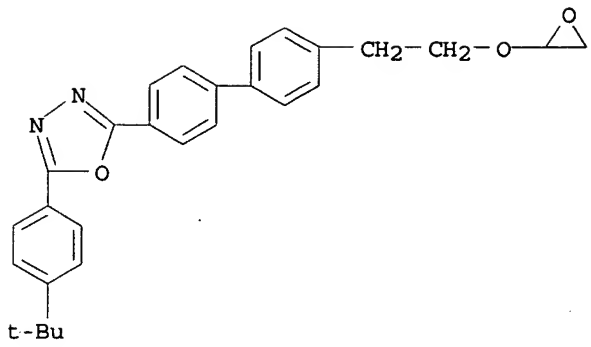
IT **302841-67-4P 841237-54-5P**
RL: DEV (Device component use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(triblock; electroluminescent devises containing conjugated conductive block copolymers)

RN 302841-67-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[4-(diphenylamino)phenyl]ethyl ester, polymer with 2-[4-(1,1-dimethylethyl)phenyl]-5-[4'-[2-(oxiranyloxy)ethyl][1,1'-biphenyl]-4-yl]-1,3,4-oxadiazole and [2-[4-[2-[4'-(2,2-diphenylethenyl)[1,1'-biphenyl]-4-yl]-1-phenylethenyl]phenyl]ethoxy]oxirane, block (9CI) (CA INDEX NAME)

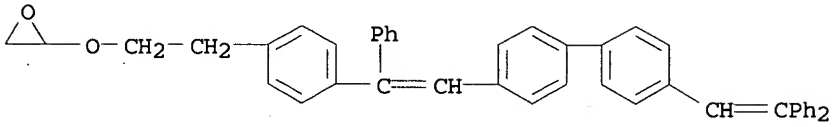
CM 1

CRN 302841-66-3
CMF C28 H28 N2 O3



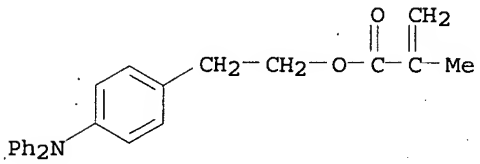
CM 2

CRN 302841-65-2
CMF C44 H36 O2



CM 3

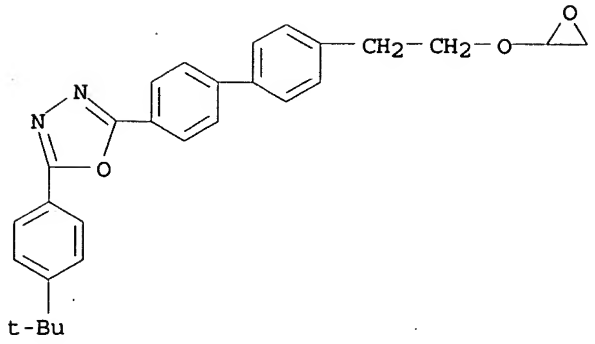
CRN 302841-64-1
CMF C24 H23 N O2



RN 841237-54-5 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-[4-(diphenylamino)phenyl]ethyl ester, polymer with 2-[4-(1,1-dimethylethyl)phenyl]-5-[4'-[2-(oxiranyloxy)ethyl][1,1'-biphenyl]-4-yl]-1,3,4-oxadiazole and [2-[4-[2-[4'-(2,2-diphenylethenyl)[1,1'-biphenyl]-4-yl]-1-phenylethenyl]phenyl]ethoxy]oxirane, triblock (9CI) (CA INDEX NAME)

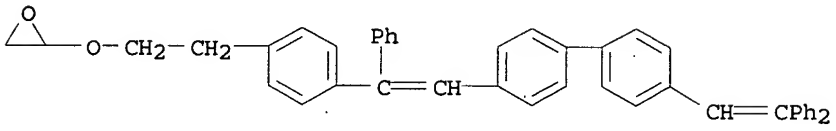
CM 1

CRN 302841-66-3
CMF C28 H28 N2 O3



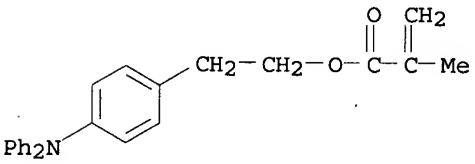
CM 2

CRN 302841-65-2
CMF C44 H36 O2



CM 3

CRN 302841-64-1
CMF C24 H23 N O2



IC ICM H01L051-00
ICS C08F291-00; C08F297-00; H01L031-04; H01L033-00
CC 76-3 (Electric Phenomena)
Section cross-reference(s): 73
IT **302841-67-4P 841237-54-5P**
RL: DEV (Device component use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(triblock; electroluminescent devises containing conjugated conductive block copolymers)

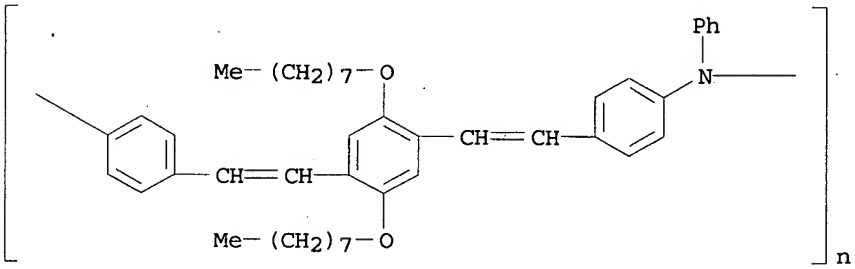
L67 ANSWER 19 OF 26 HCAPLUS COPYRIGHT 2005 ACS on STN
2000:258064 Document No. 132:341661 Field effect in organic devices with solution-doped arylamino-poly-(phenylene-vinylene). Scheinert, S.; Paasch, G.; Pohlmann, S.; Horhold, H.-H.; Stockmann, R. (Department of Solid State Electronics, Technical University of Ilmenau, Ilmenau, D-98684, Germany). Solid-State Electronics, 44(5), 845-853 (English) 2000. CODEN: SSELA5. ISSN: 0038-1101. Publisher: Elsevier Science Ltd..
AB MOS capacitors and field effect transistors with arylamino-PPV as an active layer were prepared and characterized. For this material the authors developed a doping method to increase the conductivity The field

effect was demonstrated by the measurement of capacitance voltage (CV)-curves of the MOS capacitor. In accumulation the oxide capacitance is only achieved for low frequencies. At pos. gate voltages inversion was not observed The p-doping concns. are in the range of 1016, ..., 1018 cm-3. With the realized thin film transistor structure a typical transistor behavior was demonstrated. The estimated value for the mobility is in the order of 10-4 cm2/Vs. This low value causes a high relaxation time. The measured characteristics of both devices show a large hysteresis for different sweep directions and a shift of the curves for repeated measurements. Mobile ions, the kinetics of incomplete ionization, chemical reactions of I or the polaron-bipolaron conversion might influence this behavior. Conditions to achieve inversion were determined by two-dimensional (2-D) simulation of both devices. Due to the low intrinsic d. of organic materials, one cannot demonstrate an inversion layer in an MOS capacitor. But in the transistor structure the minority carriers are injected from source and drain into the channel generating an inversion layer. Further exptl. studies are necessary to prove this prediction and to clarify the hysteresis effect.

IT **188744-21-0**
RL: DEV (Device component use); PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process); USES (Uses)
(field effect in organic devices with solution-doped arylamino-poly-(phenylene-vinylene))

RN 188744-21-0 HCAPLUS

CN Poly[(phenylimino)-1,4-phenylene-1,2-ethenediyl[2,5-bis(octyloxy)-1,4-phenylene]-1,2-ethenediyl-1,4-phenylene]. (9CI) (CA INDEX NAME)



CC 76-3 (Electric Phenomena)
Section cross-reference(s): 38

ST iodine doping arylamino polyphenylenevinylene; MOS capacitor arylamino polyphenylenevinylene; **TFT** arylamino polyphenylenevinylene; FET arylamino polyphenylenevinylene

IT 7440-21-3, Silicon, properties 7440-57-5, Gold, properties 7631-86-9, Silica, properties **188744-21-0**
RL: DEV (Device component use); PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process); USES (Uses)
(field effect in organic devices with solution-doped arylamino-poly-(phenylene-vinylene))

L67 ANSWER 20 OF 26 HCAPLUS COPYRIGHT 2005 ACS on STN

2000:126867 Document No. 132:309300 The photo- and electroluminescence of some novel light emitting copolymers. Bai, F.; Zheng, M.; Yu, G.; Zhu, D. (Laboratory of Organic Solids, Institute of Chemistry, Chinese Academy of Sciences, Beijing, Peop. Rep. China). Thin Solid Films, 363(1,2), 118-121 (English) 2000. CODEN: THSFAP. ISSN: 0040-6090. Publisher: Elsevier Science S.A..

AB A new class of novel high-efficiency light-emitting nitrogen-containing PPV-related copolymers which have hole transfer moieties such as triphenylamine (TPA) and alkylcarbazole units and conjugated aromatic units such as 4,4'-biphenylene, 1,4-phenylene, 1,4- or

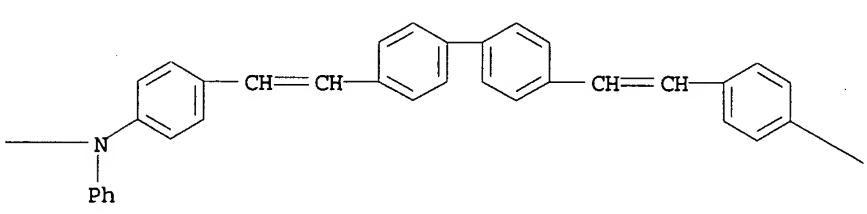
1,5-naphthylene and 9,10-anthrylene, was designed and synthesized by the well-known Wittig-Hornor reaction. The optical and elec.-properties were examined The resulting alternating copolymers were highly soluble in common organic solvents, with good film-forming properties and high fluorescence quantum yields and also emit blue/green lights when used as the active layer of LEDs.

IT **149675-71-8**
RL: PRP (Properties)
(photo- and electroluminescence of novel light emitting polyarylenealkenylenes)

RN 149675-71-8 HCAPLUS

CN Poly[(phenylimino)-1,4-phenylene-1,2-ethenediyl[1,1'-biphenyl]-4,4'-diyl-1,2-ethenediyl-1,4-phenylene] (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

n

CC 38-3 (Plastics Fabrication and Uses)
Section cross-reference(s): 76

IT **149675-71-8** 240489-91-2 252349-34-1 252349-37-4
252349-42-1 252349-44-3 252349-47-6 252349-49-8 252349-52-3
252349-54-5 265126-14-5 265126-15-6 265126-16-7 265126-17-8
265126-18-9 265126-19-0
RL: PRP (Properties)
(photo- and electroluminescence of novel light emitting polyarylenealkenylenes)

L67 ANSWER 21 OF 26 HCAPLUS COPYRIGHT 2005 ACS on STN

1999:721682 Document No. 132:36095 New light emitting materials: alternating copolymers with hole transport and emitting chromophores. Zheng, Min; Bai, Fenglian; Zhu, Daoben (Institute of Chemistry, Laboratory of Organic Solids, Chinese Academy of Sciences, Beijing, 100080, Peop. Rep. China). Journal of Applied Polymer Science, 74(14), 3351-3358 (English) 1999. CODEN: JAPNAB. ISSN: 0021-8995. Publisher: John Wiley & Sons, Inc..

AB High-efficiency light-emitting nitrogen-containing poly(phenylene vinylene) (PPV)-related copolymers, which have hole-transfer moieties such as triphenylamine (TPA) and conjugated aromatic units such as 4,4'-biphenylene, 1,4-phenylene, 2,5-dimethyl-1,4-phenylene, 1,4- or 1,5-naphthylene, 9,10-anthrylene (PAV), and 2-Methoxy-5-(2'-ethylhexyloxy)-1,4-(dichloromethyl)benzene (MEH) were designed and synthesized via the Wittig-Horner reaction. The resulting alternating copolymers are highly soluble in common organic

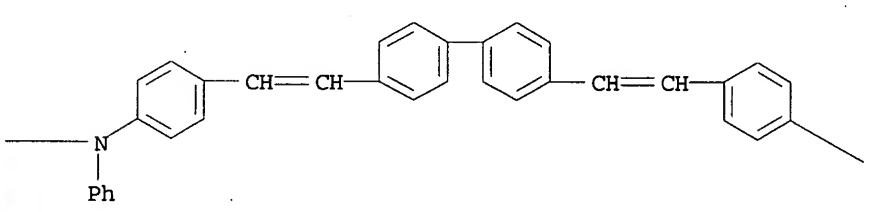
solvents. The polymers were spin-cast onto various substrates forming highly transparent homogeneous thin films without heat treatment. The introduction of TPA units in the PPV backbone improved processibility and limited theπ-conjugation length. The addnl. π-electron delocalization between the lone-paired electron in the nitrogen atom andπ-electrons in the conjugated units contributed to the improvement of the fluorescence quantum yield of the copolymers. All alternating copolymers except TPA-PAV have high-efficiency photoluminescence and they are promising for light-emitting diodes (LEDs). The TPA-PAV copolymer will emit white light when used in LED devices, due to its broad emission spectrum from charge-transfer complex formation, as observed in the absorption and emission spectra of TPA-PAV in solution For copolymers with aromatic units 1,4-phenylene, 1,4- or 1,5-naphthylene, 4,4'-biphenylene, and 9,10-anthrylene, the charge transfer from TPA to the aromatic units occurred; consequently, the fluorescence quantum yield decreased. The introduction of alkoxy groups in the polymer backbone in the TPA-MEH copolymer caused a red shift of the absorption and emission spectra of the copolymers due to the stronger delocalization of the π-conjugated system.

IT **149675-71-8P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and electronic structure of polycyclic poly(phenylene vinylene)s with hole transport and emitting chromophores for LEDs)

RN 149675-71-8 HCAPLUS

CN Poly[(phenylimino)-1,4-phenylene-1,2-ethenediyl[1,1'-biphenyl]-4,4'-diyl-1,2-ethenediyl-1,4-phenylene] (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

n

CC 35-4 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 36, 73

IT **149675-71-8P** 240489-91-2P 252349-34-1P 252349-37-4P 252349-42-1P 252349-44-3P 252349-47-6P 252349-49-8P 252349-52-3P 252349-54-5P 252349-57-8P 252349-59-0P 252349-62-5P 252669-29-7P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and electronic structure of polycyclic poly(phenylene vinylene)s with hole transport and emitting chromophores for

LEDs)

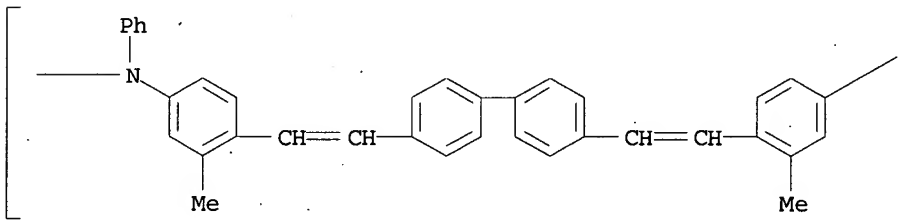
L67 ANSWER 22 OF 26 HCAPLUS COPYRIGHT 2005 ACS on STN
1998:758676 Document No. 130:73811 Styryl-containing polymer, its manufacture, and organic electroluminescent device, electrophotographic photoreceptor, and hole-transporting material using it. Ueda, Hideaki; Kitahora, Takeshi; Nozaki, Takeshi (Minolta Camera Co., Ltd., Peop. Rep. China). Jpn. Kokai Tokkyo Koho JP 10310635 A2 19981124 Heisei, 21 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1997-119192 19970509.

AB The styryl-containing polymer is represented by [Ar1CH:CHAr2N(Ar3)[Ar5N(Ar6)]mAr4CH:CH]n (Ar1-2, Ar4 = arylene; Ar5 = arylene, 2-valent condensed polycyclic group; Ar3, Ar6 = alkyl, aralkyl, aryl; Ar1-6 may be substituted; m = 0-3; n = natural number). The above polymer is manufactured by the reaction between a P compound XCH2Ar1CH2X [X = PO(OR1)2 or PR23.Y; R1 = lower alkyl; R2 = cycloalkyl, aryl; Y = halo] and an aldehyde compound OCHAr2N(Ar3)[Ar5N(Ar6)]mAr4CHO. The electroluminescent device contains the polymer in ≥1 organic compound thin layer including a light-emitting layer and the photoreceptor contains the polymer as a charge-transporting material. The hole-transporting material composed of the polymer is also claimed. The styryl-containing polymer shows good performance in charge-transporting and optical conductivity even after repeated use.

IT **217632-35-4 217632-41-2 217632-43-4**
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(styryl-containing polymer as charge-transporting material for organic electroluminescent device and electrophotog. photoreceptor)

RN 217632-35-4 HCAPLUS
CN Poly[(phenylimino)(3-methyl-1,4-phenylene)-1,2-ethenediyl[1,1'-biphenyl]-4,4'-diyl-1,2-ethenediyl(2-methyl-1,4-phenylene)] (9CI) (CA INDEX NAME)

PAGE 1-A

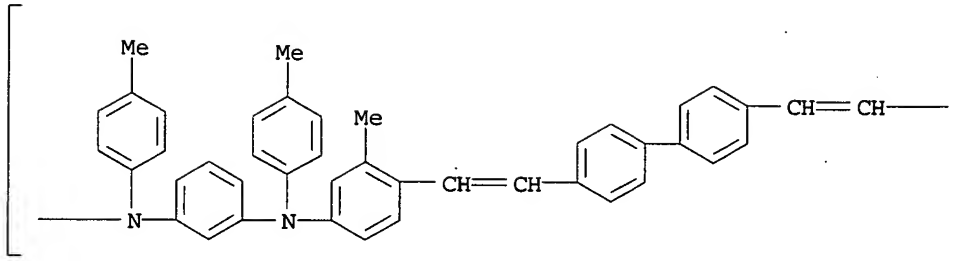


PAGE 1-B

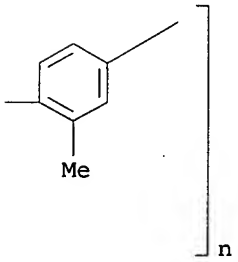
n

RN 217632-41-2 HCAPLUS
CN Poly[[(4-methylphenyl)imino]-1,3-phenylene[(4-methylphenyl)imino](3-methyl-1,4-phenylene)-1,2-ethenediyl[1,1'-biphenyl]-4,4'-diyl-1,2-ethenediyl(2-methyl-1,4-phenylene)] (9CI) (CA INDEX NAME)

PAGE 1-A

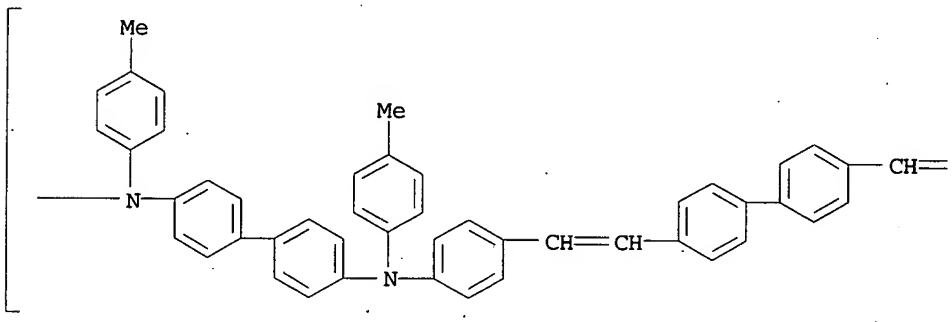


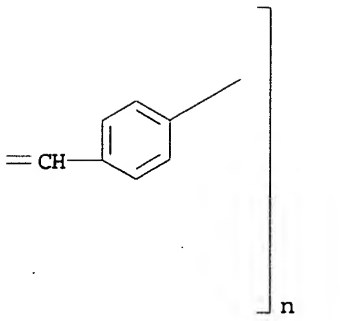
PAGE 1-B



RN 217632-43-4 HCAPLUS
CN Poly[[(4-methylphenyl)imino][1,1'-biphenyl]-4,4'-diyl[(4-methylphenyl)imino]-1,4-phenylene-1,2-ethenediyl[1,1'-biphenyl]-4,4'-diyl-1,2-ethenediyl-1,4-phenylene] (9CI) (CA INDEX NAME)

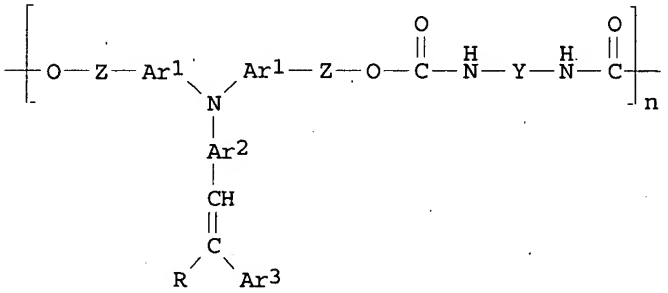
PAGE 1-A





IC ICM C08G061-12
ICS C09K011-06; G03G005-06; H05B033-22
CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 37, 38, 73
IT 217632-32-1 217632-33-2 217632-34-3**217632-35-4**
217632-36-5 217632-37-6 217632-38-7 217632-39-8 217632-40-1
217632-41-2 217632-42-3 **217632-43-4**
217632-44-5 217632-45-6 217632-46-7 217632-47-8 217632-48-9
217632-49-0
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(styryl-containing polymer as charge-transporting material for organic electroluminescent device and electrophotog. photoreceptor)

L67 ANSWER 23 OF 26 HCAPLUS COPYRIGHT 2005 ACS on STN
1995:686839 Document No. 123:97831 Electrophotographic photoreceptor. Hayata, Hirofumi (Konishiroku Photo Ind, Japan). Jpn. Kokai Tokkyo Koho JP 07056374 A2 19950303 Heisei, 18 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1993-198546 19930810.
GI



I

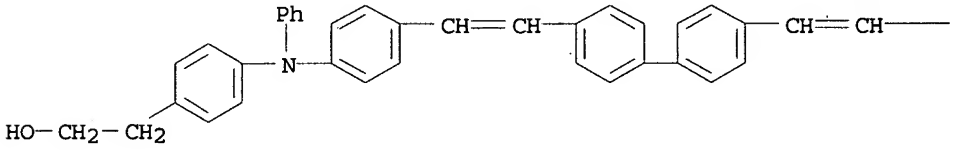
AB In the title electrophotog. photoreceptor comprising a photosensitive layer on an elec. conductive substrate, the photosensitive layer contains a polymer I [Ar1,2 = arylene; Ar3 = aryl, heterocyclyl; Y = bifunctional group; R = H, alkyl, alkoxy, aryl, heterocyclyl; R and Ar3 may form a ring with other atoms; Z = alkylene, arylene; weight-average mol. weight = 10,000-1,000,000.] as a charge-transporting material. This photoreceptor shows high sensitivity and good chargeability.
IT **165122-56-5P**
RL: DEV (Device component use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)

(charge-transporting material for electrophotog. photoreceptor)
RN 165122-56-5 HCAPLUS
CN Benzeneethanol, 4,4'-[[1,1'-biphenyl]-4,4'-diylbis[2,1-ethenediyl-4,1-phenylene(phenylimino)]]bis-, polymer with 2,4-diisocyanato-1-methylbenzene (9CI) (CA INDEX NAME)

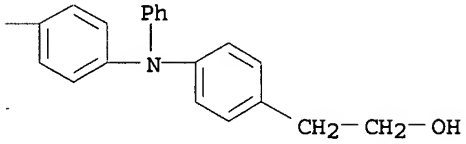
CM 1

CRN 165122-55-4
CMF C56 H48 N2 O2

PAGE 1-A

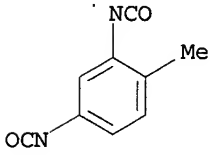


PAGE 1-B



CM 2

CRN 584-84-9
CMF C9 H6 N2 O2



IC ICM G03G005-07
CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT 165122-53-2P 165122-54-3P **165122-56-5P** 165122-58-7P
165122-59-8P 165122-61-2P 165122-63-4P 165122-64-5P
165122-66-7P 165122-68-9P 165245-41-0P
RL: DEV (Device component use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(charge-transporting material for electrophotog. photoreceptor)

L67 ANSWER 24 OF 26 HCAPLUS COPYRIGHT 2005 ACS on STN
1994:177613 Document No. 120:177613 Organic electroluminescent elements. Hosokawa, Chishio; Sakamoto, Shuji; Kusumoto, Tadashi (Idemitsu Kosan Co., Ltd., Japan). PCT Int. Appl. WO 9306189 A1 19930401, 118 pp. DESIGNATED STATES: W: US; RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, SE. (Japanese). CODEN: PIXXD2. APPLICATION: WO 1992-JP1180 19920916. PRIORITY: JP 1991-238111 19910918; JP 1992-50865 19920309.
AB The element comprises a phosphor and/or a hole-transporter material consisting of a polycarbonate having a styrylamine or a

diarylvinylenearylene structure as the repeating unit. The element has a high luminance and a long-life stability.

IT **152849-06-4P 152849-14-4P 152849-15-5P**
152849-16-6P 152849-18-8P 152849-19-9P
152849-20-2P 152849-22-4P 152849-24-6P
153568-88-8P
RL: PREP (Preparation)
(prepare and use of, as electroluminescent phosphors and/or hole transporters)

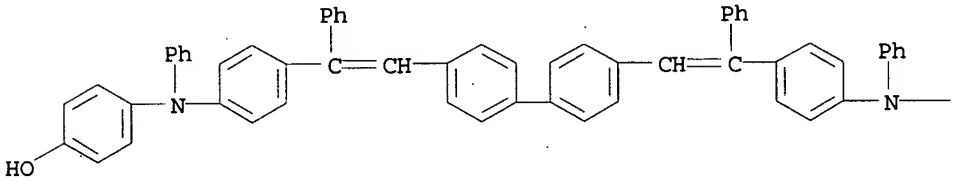
RN 152849-06-4 HCAPLUS

CN Carbonic acid, polymer with 4,4'-[[1,1'-biphenyl]-4,4'-diylbis[(1-phenyl-2,1-ethenediyl)-4,1-phenylene(phenylimino)]]bis[phenol] and 4,4'-(1-methylethylidene)bis[2-methylphenol] (9CI) (CA INDEX NAME)

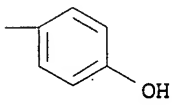
CM 1

CRN 152849-05-3
CMF C64 H48 N2 O2

PAGE 1-A

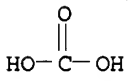


PAGE 1-B



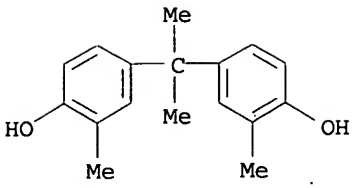
CM 2

CRN 463-79-6
CMF C H2 O3



CM 3

CRN 79-97-0
CMF C17 H20 O2

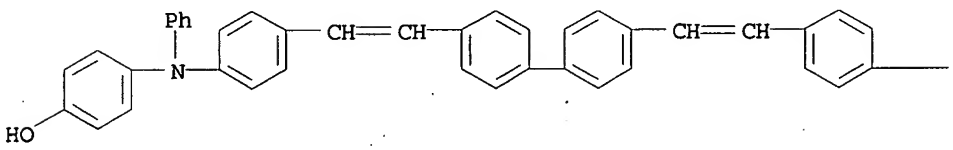


RN 152849-14-4 HCAPLUS
CN Carbonic acid, polymer with 4,4'-[[1,1'-biphenyl]-4,4'-diylbis[2,1-ethenediyl-4,1-phenylene(phenylimino)]]bis[phenol] and 4,4'-oxybis[phenol] (9CI) (CA INDEX NAME)

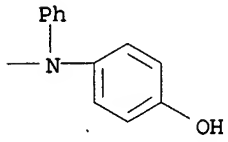
CM 1

CRN 152461-12-6
CMF C52 H40 N2 O2

PAGE 1-A

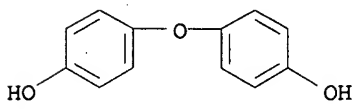


PAGE 1-B



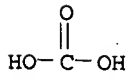
CM 2

CRN 1965-09-9
CMF C12 H10 O3



CM 3

CRN 463-79-6
CMF C H2 O3



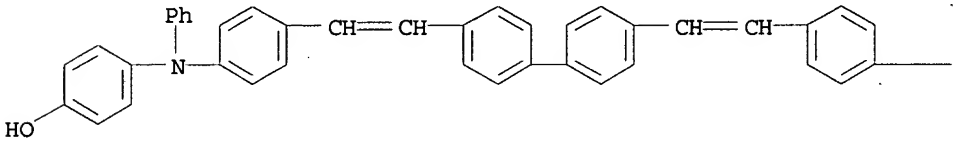
RN 152849-15-5 HCAPLUS

CN Carbonic acid, polymer with 4,4'-[[1,1'-biphenyl]-4,4'-diylbis[2,1-ethenediyl-4,1-phenylene(phenylimino)]]bis[phenol] and 4,4'-thiobis[phenol] (9CI) (CA INDEX NAME)

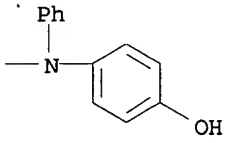
CM 1

CRN 152461-12-6
CMF C52 H40 N2 O2

PAGE 1-A

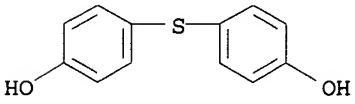


PAGE 1-B



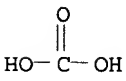
CM 2

CRN 2664-63-3
CMF C12 H10 O2 S



CM 3

CRN 463-79-6
CMF C H2 O3



RN 152849-16-6 HCAPLUS
CN Carbonic acid, polymer with 4,4'-[[1,1'-biphenyl]-4,4'-diylbis[2,1-ethenediyl(phenylimino)]]bis[phenol] and 4,4'-sulfonylbis[phenol] (9CI) (CA INDEX NAME)

CM 1

CRN 152461-12-6
CMF C52 H40 N2 O2

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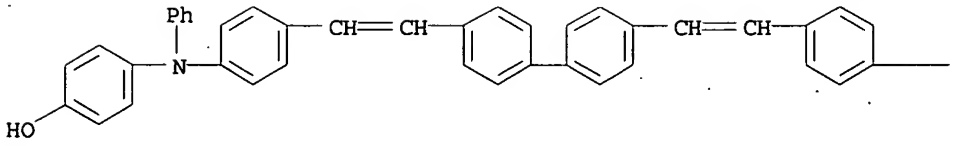
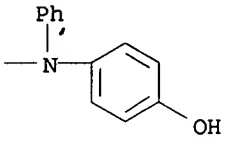
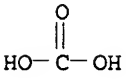


PAGE 1-B



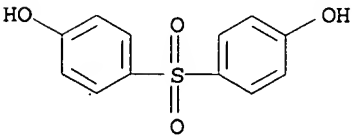
CM 2

CRN 463-79-6
CMF C H2 O3



CM 3

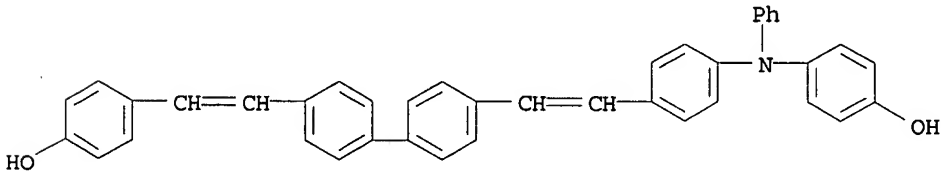
CRN 80-09-1
CMF C12 H10 O4 S



RN 152849-18-8 HCAPLUS
CN Carbonic acid, polymer with 4,4'-(1,2-ethanediyl)bis[phenol] and 4-[[4-[2-[4'-[2-(4-hydroxyphenyl)ethenyl][1,1'-biphenyl]-4-yl]ethenyl]phenyl]phenylamino]phenol (9CI) (CA INDEX NAME)

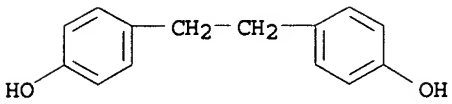
CM 1

CRN 152849-17-7
CMF C40 H31 N O2



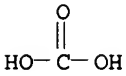
CM 2

CRN 6052-84-2
CMF C14 H14 O2



CM 3

CRN 463-79-6
CMF C H2 O3



RN 152849-19-9 HCAPLUS
CN Carbonic acid, polymer with 4,4'-[[1,1'-biphenyl]-4,4'-diylbis[2,1-ethenediyl(phenylimino)]]bis[phenol] and 4,4'-cyclohexylidenebis[phenol] (9CI) (CA INDEX NAME)

CM 1

CRN 152461-12-6
CMF C52 H40 N2 O2

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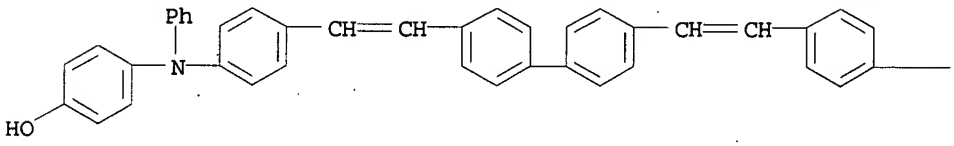
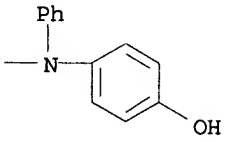
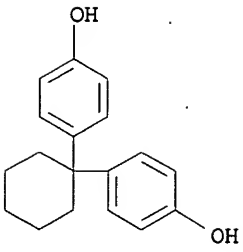


PAGE 1-B



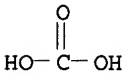
CM 2

CRN 843-55-0
CMF C18 H20 O2



CM 3

CRN 463-79-6
CMF C H2 O3



RN 152849-20-2 HCAPLUS
CN Carbonic acid, polymer with [1,1'-biphenyl]-4,4'-diol and 4,4'-[[1,1'-biphenyl]-4,4'-diylbis[2,1-ethenediyl-4,1-phenylene(phenylimino)]]bis[phenol] (9CI) (CA INDEX NAME)

CM 1

CRN 152461-12-6
CMF C52 H40 N2 O2

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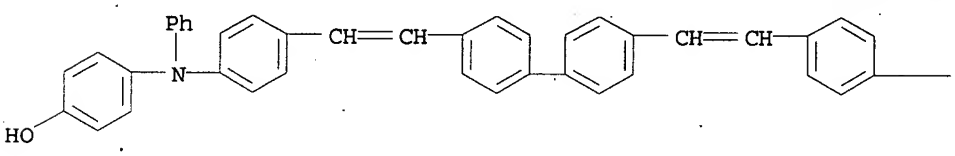
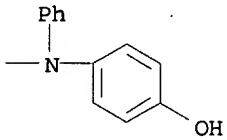
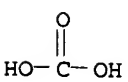


PAGE 1-B



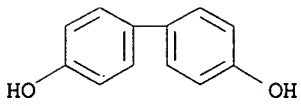
CM 2

CRN 463-79-6
CMF C H2 O3



CM 3

CRN 92-88-6
CMF C12 H10 O2



RN 152849-22-4 HCAPLUS
CN Carbonic acid, polymer with 4-[[4-[2-[4'-[2-[4-[(4-hydroxyphenyl)methylamino]phenyl]ethenyl][1,1'-biphenyl]-4-yl]ethenyl]phenyl]phenylamino]phenol and 4,4'-(1-methylethylidene)bis[phenol] (9CI) (CA INDEX NAME)

CM 1

CRN 152849-21-3
CMF C47 H38 N2 O2

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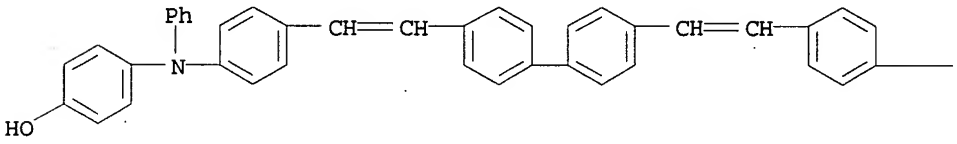

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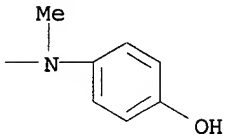
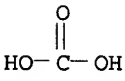


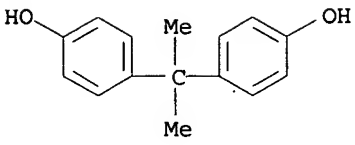
CM 2

CRN 463-79-6
CMF C H2 O3



CM 3

CRN 80-05-7
CMF C15 H16 O2



RN 152849-24-6 HCAPLUS
CN Phenol, 4,4'-[(3,3'-dimethoxy[1,1'-biphenyl]-4,4'-diyl)bis[2,1-ethenediyl-4,1-phenylene(phenylimino)]]bis-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 152849-23-5
CMF C54 H44 N2 O4

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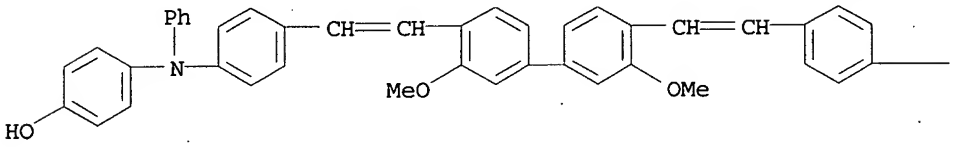
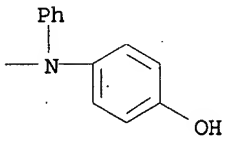


PAGE 1-B

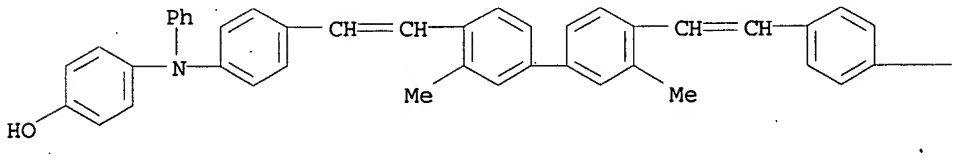


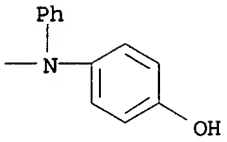
RN 153568-88-8 HCAPLUS
CN Carbonic acid, polymer with 4,4'-[(3,3'-dimethyl[1,1'-biphenyl]-4,4'-diyl)bis[2,1-ethenediyl-4,1-phenylene(phenylimino)]]bis[phenol] and 4,4'-(1-methylethylidene)bis[phenol] (9CI) (CA INDEX NAME)

CM 1

CRN 153568-87-7
CMF C54 H44 N2 O2

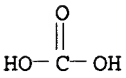
PAGE 1-A





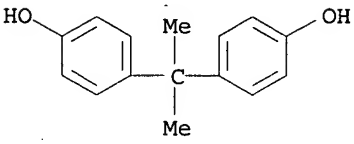
CM 2

CRN 463-79-6
CMF C H2 O3



CM 3

CRN 80-05-7
CMF C15 H16 O2



IC ICM C09K011-06
ICS H05B033-14
CC 73-5 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
Section cross-reference(s): 38
IT 146162-90-5P 152848-66-3P 152848-68-5P 152848-70-9P
152848-72-1P 152848-74-3P 152848-77-6P 152848-79-8P
152848-81-2P 152848-83-4P 152848-84-5P 152848-96-9P
152848-97-0P 152848-98-1P 152848-99-2P 152849-00-8P
152849-01-9P 152849-03-1P 152849-04-2P **152849-06-4P**
152849-09-7P 152849-10-0P 152849-12-2P **152849-14-4P**
152849-15-5P 152849-16-6P 152849-18-8P
152849-19-9P 152849-20-2P 152849-22-4P
152849-24-6P 152849-25-7P 152849-27-9P 152875-42-8P
152875-44-0P **153568-88-8P**
RL: PREP (Preparation)
(prepare and use of, as electroluminescent phosphors and/or hole transporters)

L67 ANSWER 25 OF 26 HCAPLUS COPYRIGHT 2005 ACS on STN
1994:120713 Document No. 120:120713 Polycarbonates, their preparation, and electrophotographic photoreceptors using them as photoconductive materials. Sakamoto, Hideji; Hosokawa, Chishio; Kusumoto, Tadashi (Idemitsu Kosan Co, Japan). Jpn. Kokai Tokkyo Koho JP 05230202 A2 19930907 Heisei, 17 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1992-30728 19920218.
GI For diagram(s), see printed CA Issue.
AB Polycarbonates having a repeating unit OA2CR1:CHA1CH:CR2A3OCO [I; R1-2 = H, C1-6 alkyl, C6-20 aryl; A1-3 = (un)substituted C6-20 arylene, furandiyl, thiophenediyl, Q1; R3-4 = H, halo, C1-6 alkyl,

C6-12 aryl; Y = direct bond, O, S, SO2, CR5R6, (CH2)s, cyclohexylidene, 4-phenylcyclohexylidene, Q2, A4NR7A5; R5-6 = H, CF3, C1-6 alkyl, C6-12 aryl; A4-5 = (un)substituted C6-20 arylene; R7 = C6-20 aryl; r = 4-10; s = 2-10] and polycarbonates having a repeating unit I and a repeating unit Q3 [R8-9 = H, halo, C1-6 alkyl, C6-12 aryl; X = direct bond, O, S, SO2, CR10R11, 4-phenylcyclohexylidene, Q1, (CH2)u; p, q = 1-4; u = 2-10] are claimed. The former homopolymers are prepared by treatment of HOA2CR1:CHA1CH:CR2A3OH (II) with carbonate ester-forming compds. and the latter copolymers are prepared by treatment of II and III with carbonate ester-forming compds. Electrophotog. photoreceptors comprising an elec. conductive substrate having thereon a photosensitive layer containing the above homopolymers or copolymers are also claimed. The photoreceptors show good electrophotog. properties and wear resistance.

IT **152730-66-0**

RL: USES (Uses)
(electrophotog. photoreceptors with charge-transporting layers containing)

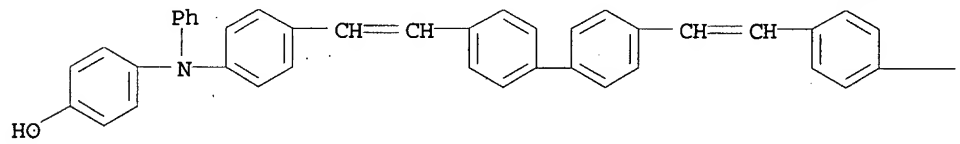
RN 152730-66-0 HCAPLUS

CN Carbonic dichloride, polymer with 4,4'-[[1,1'-biphenyl]-4,4'-diylbis[2,1-ethenediyl-4,1-phenylene(phenylimino)]]bis[phenol] and 4,4'-cyclohexylidenebis[phenol] (9CI) (CA INDEX NAME)

CM 1

CRN 152461-12-6
CMF C52 H40 N2 O2

PAGE 1-A



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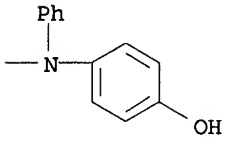
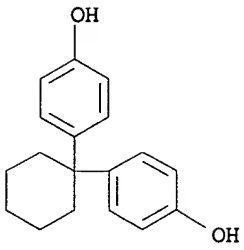


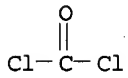
CM 2

CRN 843-55-0
CMF C18 H20 O2



CM 3

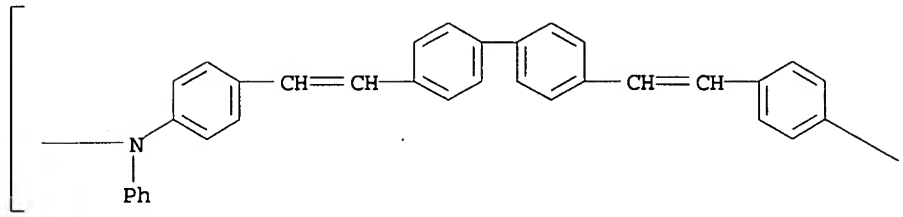
CRN 75-44-5
CMF C Cl2 O



IC ICM C08G064-04
ICS C08G064-08
CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT 152730-65-9 **152730-66-0** 152730-67-1
RL: USES (Uses)
(electrophotog. photoreceptors with charge-transporting layers containing)

L67 ANSWER 26 OF 26 HCAPLUS COPYRIGHT 2005 ACS on STN
1993:528380 Document No. 119:128380 Preparation of polystyryl compounds as carrier-transporting agents and electrophotographic photoreceptors using them. Hayata, Hirofumi; Hirose, Hisahiro; Sasaki, Osamu (Konishiroku Photo Ind, Japan). Jpn. Kokai Tokkyo Koho JP 05025102 A2 19930202 Heisei, 13 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1991-172668 19910712.
AB [CR1:CR2(A1)mCR2:CR1A2NR3A3]n [I; A1-3 = (un)substituted arylene, divalent heterocyclene; R1-3 = H, halo, alkyl, alkoxy, (un)substituted aryl, heterocyclyl; m = 1-4;n≥ 2] and electrophotog. photoreceptors containing≥1 I are claimed. I form carrier-transporting layers and electrophotog. photoreceptors using them are excellent in charging property, sensitivity, and durability in repeated use.
IT **149675-71-8**
RL: USES (Uses)
(electrophotog. photoreceptor carrier-transporting agent)
RN 149675-71-8 HCAPLUS
CN Poly[(phenylimino)-1,4-phenylene-1,2-ethenediyl[1,1'-biphenyl]-4,4'-diyl-1,2-ethenediyl-1,4-phenylene] (9CI) (CA INDEX NAME)

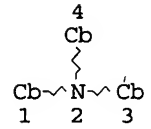
PAGE 1-A



PAGE 1-B

IC ICM C07C211-54
ICS C07D307-52; C07D333-20; C07D409-14; G03G005-06
CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT **149675-71-8** 149675-72-9 149675-73-0 149675-74-1
149675-75-2 149675-76-3 149675-77-4 149675-78-5 149675-79-6
RL: USES (Uses)
(electrophotog. photoreceptor carrier-transporting agent)

=> d que stat l83
L6 SCR 2043
L9 STR



NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
GGCAT IS UNS AT 1
GGCAT IS UNS AT 3
GGCAT IS UNS AT 4
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 4

STEREO ATTRIBUTES: NONE
L13 4788 SEA FILE=REGISTRY SSS FUL L6 AND L9
L24 STR

P 2 P 1

NODE ATTRIBUTES:
CONNECT IS M1 RC AT 1
CONNECT IS M1 RC AT 2

DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 2

STEREO ATTRIBUTES: NONE
L32 STR

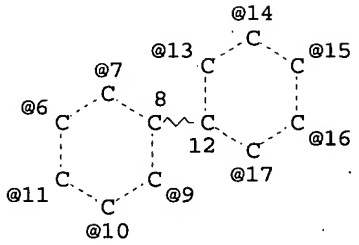
C=CH-Cy~CH=C
1 2 3 4 5

NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
GGCAT IS UNS AT 3
DEFAULT ECLEVEL IS LIMITED
ECOUNT IS M4-X14 C M0-X1 S AT 3

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 5

STEREO ATTRIBUTES: NONE
L33 STR

C=CH CH=C
1 @2 @4 5



VPA 2-7/6/11/10/9 U
VPA 4-13/14/15/16/17 U
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 16

STEREO ATTRIBUTES: NONE
L37 418 SEA FILE=REGISTRY SUB=L13 SSS FUL (L24 OR L32 OR L33)
L39 224 SEA FILE=HCAPLUS ABB=ON PLU=ON L37
L42 112 SEA FILE=REGISTRY SUB=L13 SSS FUL L24
L46 25 SEA FILE=REGISTRY SUB=L13 SSS FUL L33
L47 1 SEA FILE=REGISTRY ABB=ON PLU=ON L42 AND 1/NC
L50 24 SEA FILE=HCAPLUS ABB=ON PLU=ON L46
L56 111 SEA FILE=REGISTRY ABB=ON PLU=ON L42 NOT L47
L64 11501 SEA FILE=HCAPLUS ABB=ON PLU=ON ORG?(3A)(FILM OR THINFILM?)(3A)TRANSISTOR? OR TFT
L65 3 SEA FILE=HCAPLUS ABB=ON PLU=ON L39 AND L64
L66 73 SEA FILE=HCAPLUS ABB=ON PLU=ON L56
L67 26 SEA FILE=HCAPLUS ABB=ON PLU=ON L50 OR L65
L68 59 SEA FILE=HCAPLUS ABB=ON PLU=ON L66 NOT L67
L79 12 SEA FILE=HCAPLUS ABB=ON PLU=ON L68 AND P/DT
L80 47 SEA FILE=HCAPLUS ABB=ON PLU=ON L68 NOT L79
L81 38 SEA FILE=HCAPLUS ABB=ON PLU=ON L80 NOT 2004-2005/PY
L82 8 SEA FILE=HCAPLUS ABB=ON PLU=ON L79 AND 1907-2001/AY,PRY

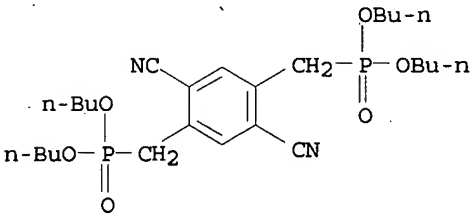
L83 46 SEA FILE=HCAPLUS ABB=ON PLU=ON L81 OR L82

=> d l83 1-46 cbib hitstr hitind

L83 ANSWER 1 OF 46 HCAPLUS COPYRIGHT 2005 ACS on STN
2003:949665 Document No. 140:184590 Photophysics and applications in plastic solar cells of conjugated polymer/fullerene composites. Lin, Hongzhen; Huang, Hongmin; He, Qingguo; Bai, Fenglian (Laboratory for Organic Solids, Center for Molecular Sciences, Institute of Chemistry, Chinese Academy of Sciences, Beijing, Peop. Rep. China). Polymers & Polymer Composites, 11(8), 679-689 (English) 2003. CODEN: PPOCEC. ISSN: 0967-3911. Publisher: Rapra Technology Ltd..
IT **660390-83-0P**
RL: DEV (Device component use); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(TPA-CNPPV, plain and composites with C60 fullerene; photophysics and applications in plastic solar cells of conjugated polymer/fullerene composites)
RN 660390-83-0 HCAPLUS
CN Phosphonic acid, [(2,5-dicyano-1,4-phenylene)bis(methylene)]bis-, tetrabutyl ester, polymer with 4,4'-(phenylimino)bis[benzaldehyde] (9CI) (CA INDEX NAME)

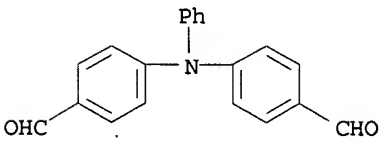
CM 1

CRN 660390-82-9
CMF C26 H42 N2 O6 P2



CM 2

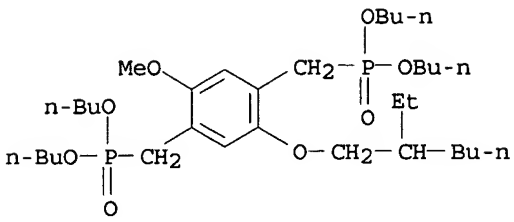
CRN 53566-95-3
CMF C20 H15 N O2



IT **252349-62-5P**
RL: DEV (Device component use); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(TPA-MEHPPV, plain and composites with C60 fullerene; photophysics and applications in plastic solar cells of conjugated polymer/fullerene composites)
RN 252349-62-5 HCAPLUS
CN Phosphonic acid, [[2-[(2-ethylhexyl)oxy]-5-methoxy-1,4-phenylene]bis(methylene)]bis-, tetrabutyl ester, polymer with 4,4'-(phenylimino)bis[benzaldehyde] (9CI) (CA INDEX NAME)

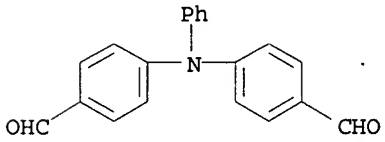
CM 1

CRN 252349-61-4
CMF C33 H62 O8 P2



CM 2

CRN 53566-95-3
CMF C20 H15 N O2



CC 52-2 (Electrochemical, Radiational, and Thermal Energy Technology)
Section cross-reference(s): 35, 38, 49, 76

IT **660390-83-0P**
RL: DEV (Device component use); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(TPA-CNPPV, plain and composites with C60 fullerene; photophysics and applications in plastic solar cells of conjugated polymer/fullerene composites)

IT **252349-62-5P**
RL: DEV (Device component use); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(TPA-MEHPPV, plain and composites with C60 fullerene; photophysics and applications in plastic solar cells of conjugated polymer/fullerene composites)

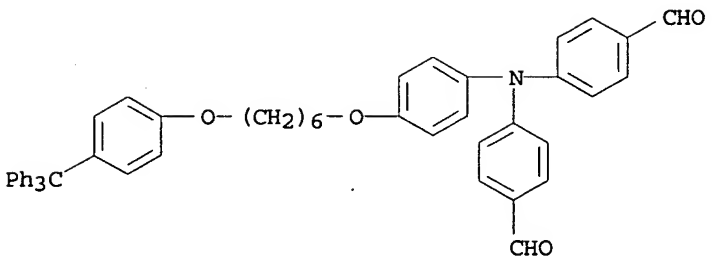
L83 ANSWER 2 OF 46 HCAPLUS COPYRIGHT 2005 ACS on STN
2003:413420 Document No. 139:140229 Improved efficiency of PPV due to bulky tetraphenylmethane pendants. Li, H. C.; Liu, S. W.; Wang, L. X.; Jing, X. B.; Wang, F. S.; Wu, H. B.; Peng, J. B.; Cao, Y. (State Key Laboratory of Polymer Physics and Chemistry, Changchun Institute of Applied Chemistry, Chinese Academy of Sciences, Changchun, 130022, Peop. Rep. China). Synthetic Metals, 135-136, 203-204 (English) 2003. CODEN: SYMEDZ. ISSN: 0379-6779. Publisher: Elsevier Science B.V..

IT **568579-39-5P**
RL: POF (Polymer in formulation); PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(improved luminescence efficiency of PPV due to bulky phenylmethane pendants)

RN 568579-39-5 HCAPLUS
CN Phosphonium, [1,4-phenylenebis(methylene)]bis[tributyl-, dichloride, polymer with 4,4'-[[4-[[6-[4-(triphenylmethyl)phenoxy]hexyl]oxy]phenyl]imino]bis[benzaldehyde] (9CI) (CA INDEX NAME)

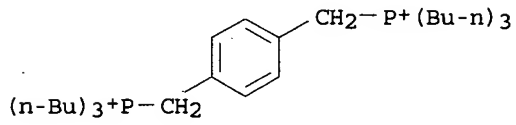
CM 1

CRN 568579-38-4
CMF C51 H45 N O4



CM 2

CRN 79428-94-7
CMF C32 H62 P2 . 2 Cl



●2 Cl⁻

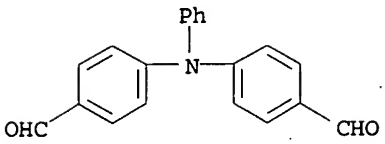
CC 73-5 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
Section cross-reference(s): 36, 38
IT **568579-39-5P** 568579-40-8P
RL: POF (Polymer in formulation); PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(improved luminescence efficiency of PPV due to bulky phenylmethane pendants)

L83 ANSWER 3 OF 46 HCAPLUS COPYRIGHT 2005 ACS on STN
2003:413403 Document No. 139:157059 Electroluminescent and photovoltaic properties of an alternating copolymer containing hole transporting moieties. Huang, Hongmin; He, Qingguo; Lin, Hongzhen; Bai, Fenglian; Cao, Yong (The Laboratory of Organic Solid, The Center for Molecular Sciences, In Stitute of Chemistry, The Chinese Academy of Sciences, Beijing, 100080, Peop. Rep. China). Synthetic Metals, 135-136, 167-168 (English) 2003. CODEN: SYMEDZ. ISSN: 0379-6779. Publisher: Elsevier Science B.V..
IT **569671-29-0**
RL: DEV (Device component use); PRP (Properties); USES (Uses)
(electroluminescent and photovoltaic properties of an alternating copolymer containing hole transporting moieties)
RN 569671-29-0 HCAPLUS
CN Phosphonium, [(2,5-dimethoxy-1,4-phenylene)bis(methylene)]bis[triphenyl-, dichloride, polymer with 4,4'-(phenylimino)bis[benzaldehyde] (9CI) (CA INDEX NAME)

CM 1

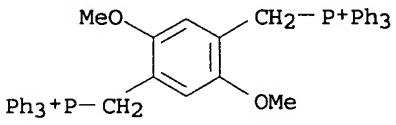
CRN 53566-95-3

CMF C20 H15 N O2



CM 2

CRN 10273-64-0
CMF C46 H42 O2 P2 . 2 Cl



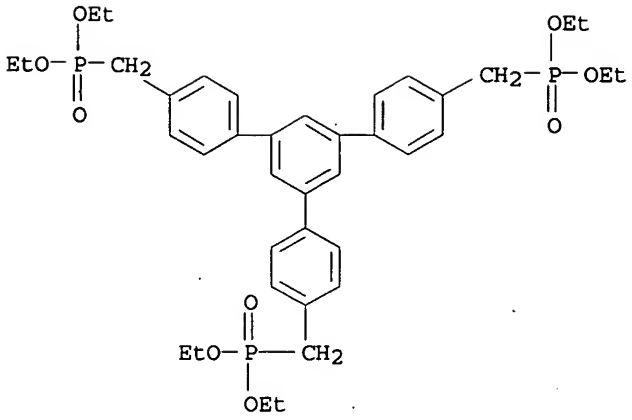
●2 Cl⁻

CC 73-11 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
IT 214773-45-2 **569671-29-0**
RL: DEV (Device component use); PRP (Properties); USES (Uses)
(electroluminescent and photovoltaic properties of an alternating copolymer containing hole transporting moieties)

L83 ANSWER 4 OF 46 HCAPLUS COPYRIGHT 2005 ACS on STN
2003:304437 Document No. 139:85955 Synthesis and spectroscopic properties of a series of hyperbranched conjugated molecules with 1,3,5-triphenylbenzene as cores. He, Qingguo; Huang, Hongmin; Yang, Junlin; Lin, Hongzhen; Bai, Fenglian (Institute of Chemistry, Lab of Organic Solids, Center for Molecular Science, Chinese Academy of Science, Beijing, 100080, Peop. Rep. China). Journal of Materials Chemistry, 13(5), 1085-1089 (English) 2003. CODEN: JMACEP. ISSN: 0959-9428. Publisher: Royal Society of Chemistry.
IT **556838-08-5DP**, p-tert-butylphenylvinyl-terminated
RL: DEV (Device component use); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(hyperbranched; synthesis and spectroscopic properties of hyperbranched conjugated polyphenylenevinylenes with 1,3,5-triphenylbenzene as cores)
RN 556838-08-5 HCAPLUS
CN Phosphonic acid, [[5'-[4-[(diethoxyphosphinyl)methyl]phenyl][1,1':3',1''-terphenyl]-4,4''-diyl]bis(methylene)]bis-, tetraethyl ester, polymer with 4,4'-(phenylimino)bis[benzaldehyde] (9CI) (CA INDEX NAME)

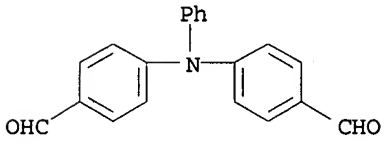
CM 1

CRN 353289-50-6
CMF C39 H51 O9 P3



CM 2

CRN 53566-95-3
CMF C20 H15 N O2



CC 37-3 (Plastics Manufacture and Processing)
Section cross-reference(s): 73

IT **556838-08-5DP**, p-tert-butylphenylvinyl-terminated
556838-09-6DP, p-tert-butylphenylvinyl-terminated 556838-10-9DP, p-tert-butylphenylvinyl-terminated
RL: DEV (Device component use); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(hyperbranched; synthesis and spectroscopic properties of hyperbranched conjugated polyphenylenevinylenes with 1,3,5-triphenylbenzene as cores)

L83 ANSWER 5 OF 46 HCAPLUS COPYRIGHT 2005 ACS on STN
2003:216438 Document No. 139:60018 Polymer light-emitting diodes based on a bipolar transporting luminescent polymer. Zhang, Yanguang; Hu, Yufeng; Li, Hongchao; Wang, Lixiang; Jing, Xiabin; Wang, Fosong; Ma, Dongge (State Key Laboratory of Polymer Physics and Chemistry, Changchun Institute of Applied Chemistry, Chinese Academy of Sciences, Changchun, 130022, Peop. Rep. China). Journal of Materials Chemistry, 13(4), 773-777 (English) 2003. CODEN: JMACEP. ISSN: 0959-9428. Publisher: Royal Society of Chemistry.

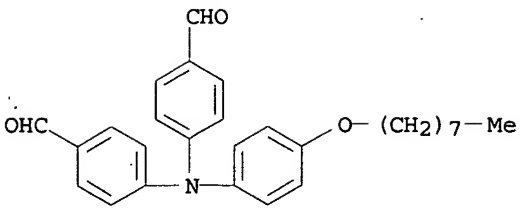
IT **374630-37-2P 374630-50-9P**
RL: DEV (Device component use); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(bipolar transporting luminescent polymers for LEDs)

RN 374630-37-2 HCAPLUS

CN Phosphonium, [1,4-phenylenebis(methylene)]bis[tributyl-, dichloride, polymer with 4,4'-[[4-(octyloxy)phenyl]imino]bis[benzaldehyde] (9CI) (CA INDEX NAME)

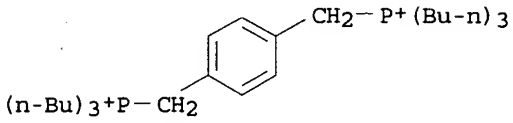
CM 1

CRN 350576-80-6
CMF C28 H31 N O3



CM 2

CRN 79428-94-7
CMF C32 H62 P2 . 2 Cl

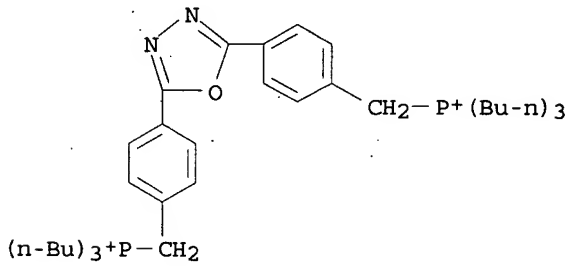


●2 Cl⁻

RN 374630-50-9 HCAPLUS
CN Phosphonium, [1,3,4-oxadiazole-2,5-diylbis(4,1-phenylenemethylene)]bis[tributyl-, dibromide, polymer with 4,4'-[[4-(octyloxy)phenyl]imino]bis[benzaldehyde] (9CI) (CA INDEX NAME)

CM 1

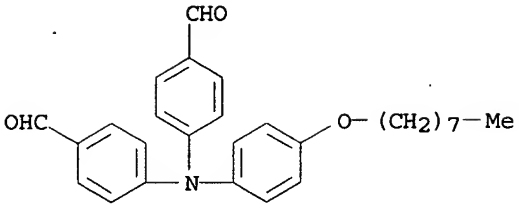
CRN 374630-35-0
CMF C40 H66 N2 O P2 . 2 Br



●2 Br⁻

CM 2

CRN 350576-80-6
CMF C28 H31 N O3

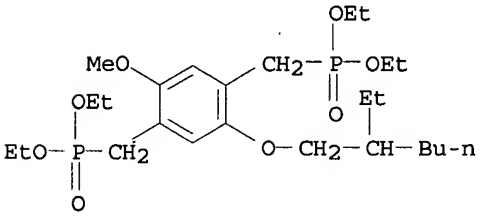


CC 73-11 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
Section cross-reference(s): 25, 35, 36, 76, 77
IT 350576-82-8P 350576-93-1P **374630-37-2P**
374630-50-9P
RL: DEV (Device component use); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(bipolar transporting luminescent polymers for LEDs)

L83 ANSWER 6 OF 46 HCAPLUS COPYRIGHT 2005 ACS on STN
2003:49087 Document No. 138:392561 Photo-physical and lasing characterization of neat films of 4-methyl-TPD and of an alternating copolymer of 4-methyl-TPD with MEH-PPV. Philip, R.; Holzer, W.; Penzkofer, A.; Tillmann, H.; Horhold, H.-H. (Institut II--Experimentelle und Angewandte Physik, Universitat Regensburg, Regensburg, D-93040, Germany). Synthetic Metals, 132(3), 297-308 (English) 2003. CODEN: SYMEDZ. ISSN: 0379-6779. Publisher: Elsevier Science B.V..
IT **391257-49-1P 525588-70-9P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(photo-phys. and lasing characterization of neat films of 4-Me-TPD and of an alternating copolymer of 4-Me-TPD with MEH-PPV)
RN 391257-49-1 HCAPLUS
CN Phosphonic acid, [[2-[(2-ethylhexyl)oxy]-5-methoxy-1,4-phenylene]bis(methylene)]bis-, tetraethyl ester, polymer with 4,4'-[[1,1'-biphenyl]-4,4'-diylbis[(4-methylphenyl)imino]]bis[benzaldehyde] (9CI) (CA INDEX NAME)

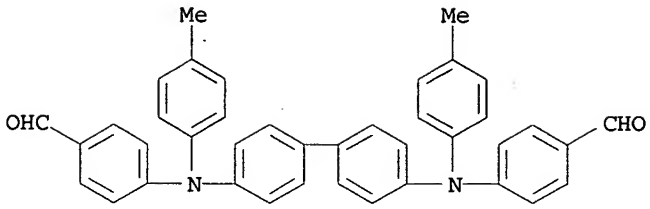
CM 1

CRN 181307-48-2
CMF C25 H46 O8 P2



CM 2

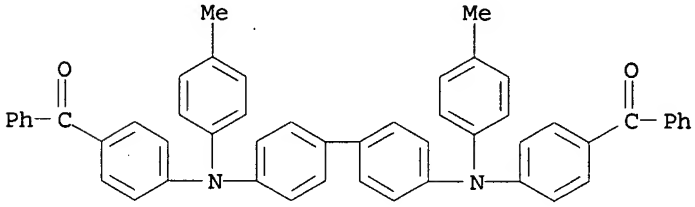
CRN 181064-88-0
CMF C40 H32 N2 O2



RN 525588-70-9 HCAPLUS
CN Phosphonic acid, [[2-[(2-ethylhexyl)oxy]-5-methoxy-1,4-phenylene]bis(methylene)]bis-, tetraethyl ester, polymer with [[1,1'-biphenyl]-4,4'-diylbis[[(4-methylphenyl)imino]-4,1-phenylene]]bis[phenylmethanone] (9CI) (CA INDEX NAME)

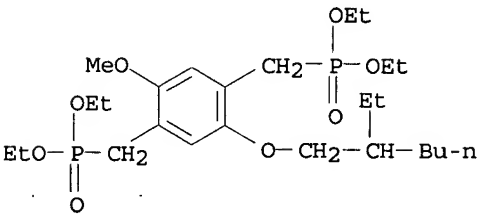
CM 1

CRN 525588-69-6
CMF C52 H40 N2 O2



CM 2

CRN 181307-48-2
CMF C25 H46 O8 P2



CC 73-10 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
Section cross-reference(s): 36
IT **391257-49-1P** 391257-52-6P 524918-66-9P
525588-70-9P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(photo-phys. and lasing characterization of neat films of 4-Me-TPD and of an alternating copolymer of 4-Me-TPD with MEH-PPV)

L83 ANSWER 7 OF 46 HCAPLUS COPYRIGHT 2005 ACS on STN
2002:849713 Document No. 137:360138 Luminescent block copolymers with conjugated bonds. Noguchi, Takanobu; Tsubata, Yoshiaki; Doi, Shuji (Sumitomo Chemical Company, Limited, Japan). PCT Int. Appl. WO 2002088223 A1 20021107, 77 pp. DESIGNATED STATES: W: KR, US; RW:

AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR. (Japanese). CODEN: PIXXD2. APPLICATION: WO 2002-JP4060 20020424. PRIORITY: JP 2001-132011 20010427; JP 2001-132002 20010427.

IT **474787-35-4P**

RL: SPN (Synthetic preparation); PREP (Preparation)
(luminescent block copolymers with conjugated bonds)

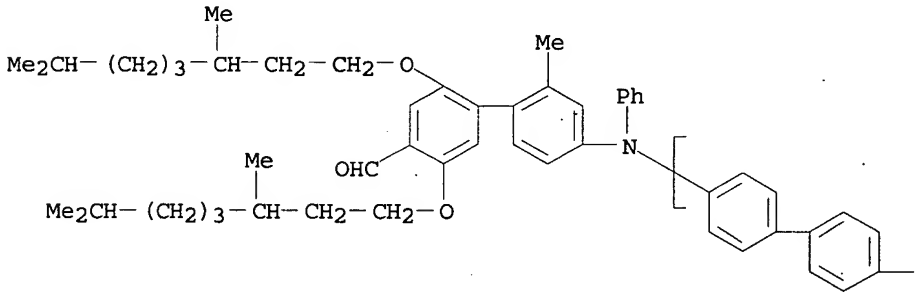
RN 474787-35-4 HCAPLUS

CN Poly[(phenylimino)(2,2'-dimethyl[1,1'-biphenyl]-4,4'-diyl)(phenylimino)[1,1'-biphenyl]-4,4'-diyl],α-[4'-[[2',5'-bis[(3,7-dimethyloctyl)oxy]-4'-formyl-2-methyl[1,1'-biphenyl]-4-yl]phenylamino][1,1'-biphenyl]-4-yl]ω-[[2',5'-bis[(3,7-dimethyloctyl)oxy]-4'-formyl-2-methyl[1,1'-biphenyl]-4-yl]phenylamino]-, polymer withα,ω-bis[4-[(diethoxyphosphinyl)methyl]-2,5-bis[(3,7-dimethyloctyl)oxy]phenyl]poly(9,9-dioctyl-9H-fluorene-2,7-diyl), block (9CI) (CA INDEX NAME)

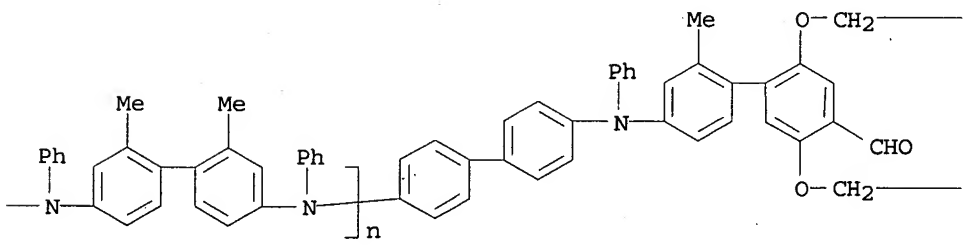
CM 1

CRN 474787-34-3
CMF (C38 H30 N2)n C92 H120 N2 O6
CCI PMS

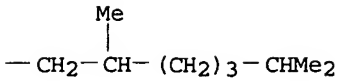
PAGE 1-A

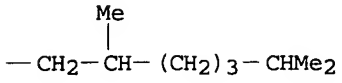


PAGE 1-B



PAGE 1-C

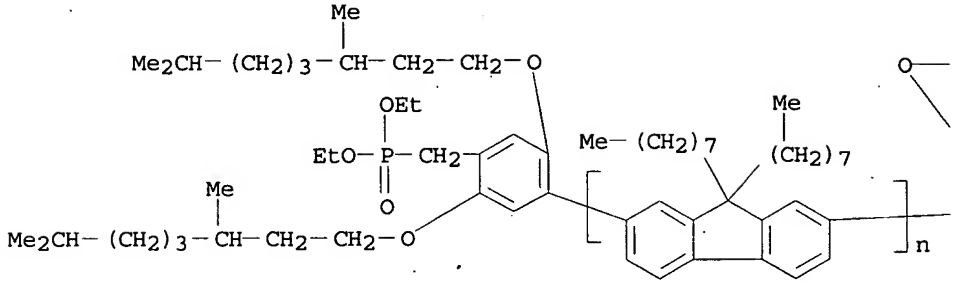




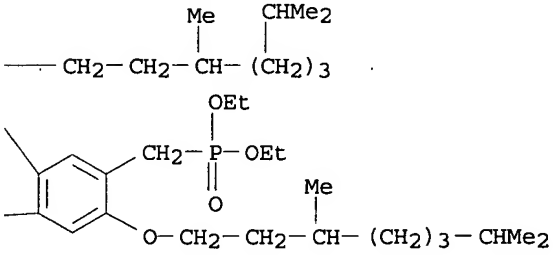
CM 2

CRN 474787-33-2
CMF (C29 H40)n C62 H112 O10 P2
CCI PMS

PAGE 1-A



PAGE 1-B



IC ICM C08G081-00
ICS G02F001-1335; H05B033-14; H05B033-12; C09K011-06
CC 73-11 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
Section cross-reference(s): 35, 36, 38
IT 474787-32-1P **474787-35-4P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(luminescent block copolymers with conjugated bonds)

L83 ANSWER 8 OF 46 HCAPLUS COPYRIGHT 2005 ACS on STN
2002:806046 Document No. 138:113949 Electrochemistry of the films of a novel class C60 covalently linked PPV derivative: electrochemical quartz crystal microbalance study in acetonitrile solutions of tetra-n-butylammonium cations. Liu, Ying; Fan, Louzhen; Li,

Yongfang; Xiao, Shengxiong; Li, Yuliang (Department of Chemistry, Beijing Normal University, Beijing, 100875, Peop. Rep. China). Journal of Applied Polymer Science, 86(11), 2737-2741 (English) 2002. CODEN: JAPNAB. ISSN: 0021-8995. Publisher: John Wiley & Sons, Inc..

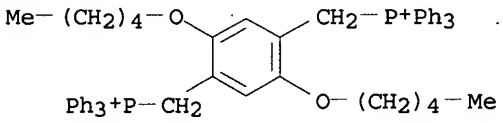
IT **391874-44-5D**, reaction products with fullerene
RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PRP (Properties); RCT (Reactant); PROC (Process); RACT (Reactant or reagent)
(PPV-2-C60; electrochem. oxidation and reduction in acetonitrile solns. containing tetrabutylammonium cations in cyclic voltammetry and electrochem. quartz crystal microbalance study)

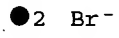
RN 391874-44-5 HCAPLUS

CN Phosphonium, [[2,5-bis(pentyloxy)-1,4-phenylene]bis(methylene)]bis[triphenyl-, dibromide, polymer with 9-(3-azidopropyl)-9H-carbazole-3,6-dicarboxaldehyde and 4,4'-(phenylimino)bis[benzaldehyde] (9CI) (CA INDEX NAME)

CM 1

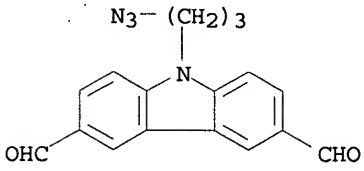
CRN 332865-19-7
CMF C54 H58 O2 P2 . 2 Br





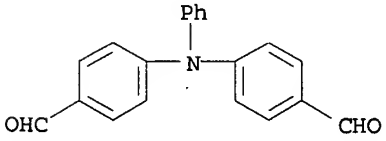
CM 2

CRN 332865-09-5
CMF C17 H14 N4 O2



CM 3

CRN 53566-95-3
CMF C20 H15 N O2



CC 72-2 (Electrochemistry)
Section cross-reference(s): 35, 36

IT **391874-44-5D**, reaction products with fullerene
RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PRP (Properties); RCT (Reactant); PROC (Process); RACT (Reactant or reagent)
(PPV-2-C60; electrochem. oxidation and reduction in acetonitrile solns. containing tetrabutylammonium cations in cyclic voltammetry and electrochem. quartz crystal microbalance study)

L83 ANSWER 9 OF 46 HCAPLUS COPYRIGHT 2005 ACS on STN
2002:712225 Document No. 138:136852 Nonlinear optical and two-photon absorption properties of 1,3,5-tricyano-2,4,6-tris(styryl)benzene-containing octupolar oligomers. Cho, Bong Rae; Piao, Ming Jun; Son, Kyung Hwa; Lee, Sang Hae; Yoon, Soo Jung; Jeon, Seung-Joon; Cho, Minhaeng (Molecular Opto-Electronics Laboratory, Department of Chemistry and Center for Electro- and Photo-Responsive Molecules, Korea University, Seoul, 136-701, S. Korea). Chemistry--A European Journal, 8(17), 3907-3916 (English) 2002. CODEN: CEUJED. ISSN: 0947-6539. Publisher: Wiley-VCH Verlag GmbH & Co. KGaA.

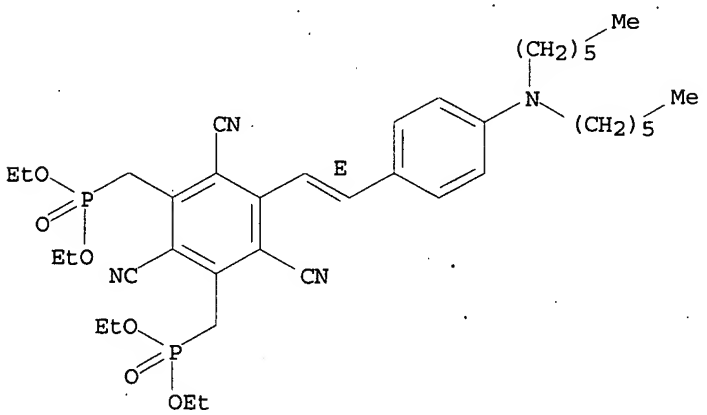
IT **491876-28-9P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and nonlinear optical and two-photon absorption properties of 1,3,5-tricyano-2,4,6-tris(styryl)benzene-containing octupolar oligomers)

RN 491876-28-9 HCAPLUS
CN Phosphonic acid, [[2,4,6-tricyano-5-[(1E)-2-[4-(dihexylamino)phenyl]ethenyl]-1,3-phenylene]bis(methylene)]bis-, tetraethyl ester, polymer with 4,4'-(phenylimino)bis[benzaldehyde] (9CI) (CA INDEX NAME)

CM 1

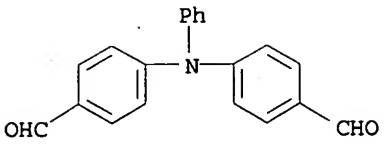
CRN 491876-17-6
CMF C39 H56 N4 O6 P2

Double bond geometry as shown.



CM 2

CRN 53566-95-3
CMF C20 H15 N O2

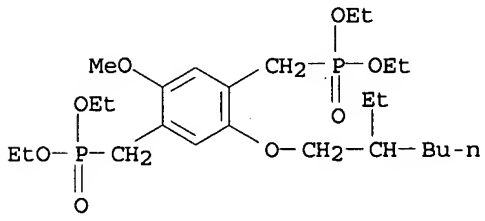


CC 22-9 (Physical Organic Chemistry)
Section cross-reference(s): 73
IT 491876-24-5P 491876-25-6P 491876-27-8P**491876-28-9P**
491876-30-3P 491876-33-6DP, reaction product with
N-(p-formylphenyl)-N-phenylamine 492455-28-4P
RL: PRP (Properties); SPN (Synthetic preparation); PREP
(Preparation)
(preparation and nonlinear optical and two-photon absorption
properties of 1,3,5-tricyano-2,4,6-tris(styryl)benzene-containing
octupolar oligomers)

L83 ANSWER 10 OF 46 HCAPLUS COPYRIGHT 2005 ACS on STN
2002:676732 Document No. 138:46828 Poly(p-phenylenevinylene)
derivatives: new promising materials for nonlinear all-optical
waveguide switching. Bader, Mark Andreas; Marowsky, Gerd; Bahtiar,
Ayi; Koynov, Kaloian; Bubeck, Christoph; Tillmann, Hartwig; Horhold,
Hans-Heinrich; Pereira, Suresh (Laser-Laboratorium Gottingen,
Gottingen, 37077, Germany). Journal of the Optical Society of
America B: Optical Physics, 19(9), 2250-2262 (English) 2002. CODEN:
JOBPDE. ISSN: 0740-3224. Publisher: Optical Society of America.
IT **350704-93-7 391257-49-1**
RL: DEV (Device component use); PRP (Properties); USES (Uses)
(Poly(p-phenylenevinylene) derivs.: new promising materials for
nonlinear all-optical waveguide switching)
RN 350704-93-7 HCAPLUS
CN Phosphonic acid, [[2-[(2-ethylhexyl)oxy]-5-methoxy-1,4-
phenylene]bis(methylene)]bis-, tetraethyl ester, polymer with
4,4'-[[1,1'-biphenyl]-4,4'-diylbis[(4-methylphenyl)imino]]bis[benzal
dehyde] and 2,5-dimethoxy-1,4-benzenedicarboxaldehyde (9CI) (CA
INDEX NAME)

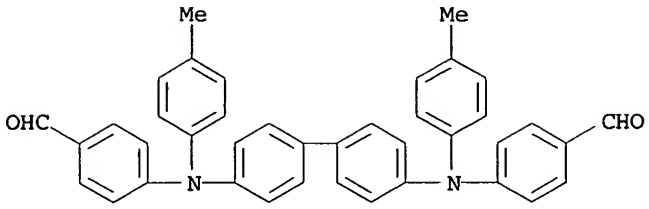
CM 1

CRN 181307-48-2
CMF C25 H46 O8 P2



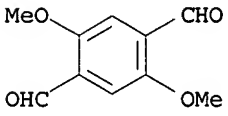
CM 2

CRN 181064-88-0
CMF C40 H32 N2 O2



CM 3

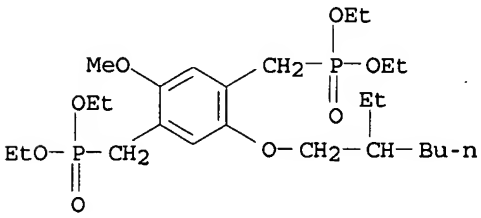
CRN 7310-97-6
CMF C10 H10 O4



RN 391257-49-1 HCAPLUS
CN Phosphonic acid, [[2-[(2-ethylhexyl)oxy]-5-methoxy-1,4-phenylene]bis(methylene)]bis-, tetraethyl ester, polymer with 4,4'-[[1,1'-biphenyl]-4,4'-diylbis[(4-methylphenyl)imino]]bis[benzaldehyde] (9CI) (CA INDEX NAME)

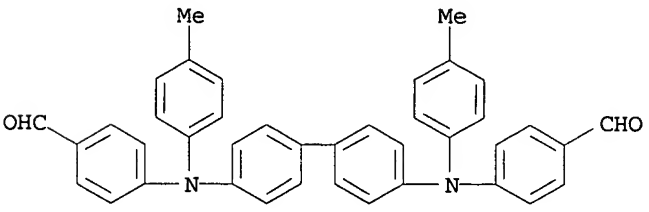
CM 1

CRN 181307-48-2
CMF C25 H46 O8 P2



CM 2

CRN 181064-88-0
CMF C40 H32 N2 O2



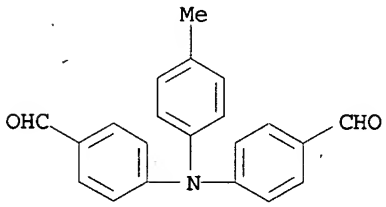
CC 73-10 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
IT 26009-24-5, Poly(p-phenylene vinylene) 116771-27-8, DPOP-PPV

138184-36-8, MEH-PPV 350704-90-4**350704-93-7**
391257-49-1
RL: DEV (Device component use); PRP (Properties); USES (Uses)
(Poly(p-phenylenevinylene) derivs.: new promising materials for nonlinear all-optical waveguide switching)

L83 ANSWER 11 OF 46 HCAPLUS COPYRIGHT 2005 ACS on STN
2002:633282 Document No. 137:325879 Electroluminescent properties of a triphenylamine-containing poly(phenylenevinylene). Pu, Yong-Jin; Soma, Minoru; Kido, Junji; Nishide, Hiroyuki (Department of Applied Chemistry, Waseda University, Tokyo, 169-8555, Japan). Journal of Photopolymer Science and Technology, 15(2), 259-260 (English) 2002. CODEN: JSTEEW. ISSN: 0914-9244. Publisher: Technical Association of Photopolymers, Japan.
IT **313242-56-7P**
RL: DEV (Device component use); PNU (Preparation, unclassified); PRP (Properties); PREP (Preparation); USES (Uses)
(luminescence response and performance of prepared phenylamine-poly(phenylenevinylene) as emitter layer and fluorescent mol. host in LEDs)
RN 313242-56-7 HCAPLUS
CN Phosphonic acid, [1,4-phenylenebis(methylene)]bis-, tetraethyl ester, polymer with 4,4'-[(4-methylphenyl)imino]bis[benzaldehyde] (9CI) (CA INDEX NAME)

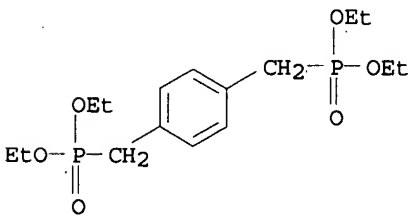
CM 1

CRN 122112-54-3
CMF C21 H17 N O2



CM 2

CRN 4546-04-7
CMF C16 H28 O6 P2



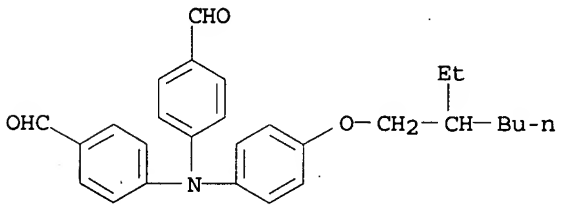
CC 36-5 (Physical Properties of Synthetic High Polymers)
Section cross-reference(s): 35, 73
IT 313242-54-5P, Poly(4-methoxytriphenylamine-alt-1,4-phenylenevinylene), SRU **313242-56-7P**
RL: DEV (Device component use); PNU (Preparation, unclassified); PRP (Properties); PREP (Preparation); USES (Uses)
(luminescence response and performance of prepared phenylamine-poly(phenylenevinylene) as emitter layer and

fluorescent mol. host in LEDs)

L83 ANSWER 12 OF 46 HCAPLUS COPYRIGHT 2005 ACS on STN
2002:379086 Document No. 137:185916 Synthesis and properties of new electroluminescent polymers possessing both hole and electron-transporting units in the main chain. Kim, Sang Woo; Shim, Sang Chul; Jung, Byung-Jun; Shim, Hong-Ku (Center for Molecular Design and Synthesis, School of Molecular Science-BK21, Department of Chemistry, Korea Advanced Institute of Science and Technology, Yusung-Gu, Taejeon, 305-701, S. Korea). Polymer, 43(15), 4297-4305 (English) 2002. CODEN: POLMAG. ISSN: 0032-3861. Publisher: Elsevier Science Ltd..
IT **450944-95-3P 450944-97-5P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(electroluminescent polymers possessing both hole and electron-transporting units in the main chain)
RN 450944-95-3 HCAPLUS
CN Phosphonium, [1,3,4-oxadiazole-2,5-diylbis(4,1-phenylenemethylene)]bis[triphenyl-, dibromide, polymer with 4,4'-[[4-[(2-ethylhexyl)oxy]phenyl]imino]bis[benzaldehyde] (9CI) (CA INDEX NAME)

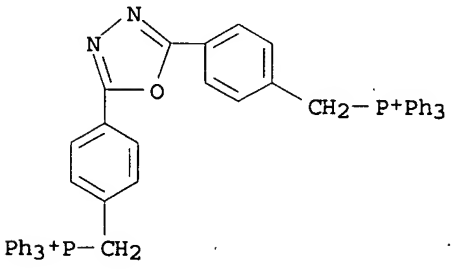
CM 1

CRN 437769-71-6
CMF C28 H31 N O3



CM 2

CRN 221615-56-1
CMF C52 H42 N2 O P2 . 2 Br



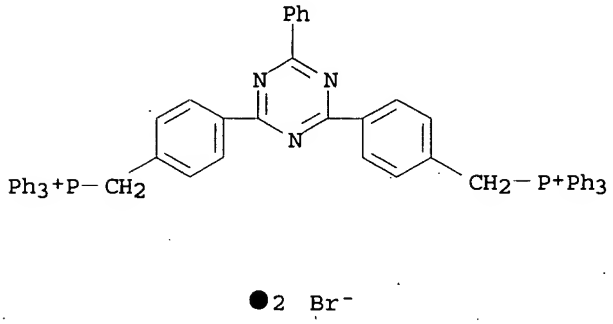
●2 Br⁻

RN 450944-97-5 HCAPLUS
CN Phosphonium, [(6-phenyl-1,3,5-triazine-2,4-diyl)bis(4,1-phenylenemethylene)]bis[triphenyl-, dibromide, polymer with

4,4'-[[4-[(2-ethylhexyl)oxy]phenyl]imino]bis[benzaldehyde] (9CI)
(CA INDEX NAME)

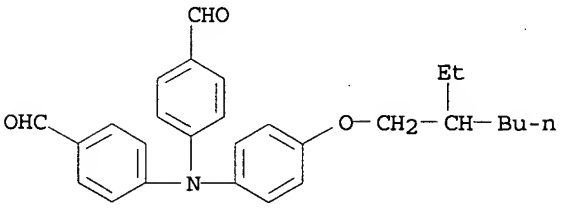
CM 1

CRN 450944-91-9
CMF C59 H47 N3 P2 . 2 Br



CM 2

CRN 437769-71-6
CMF C28 H31 N O3



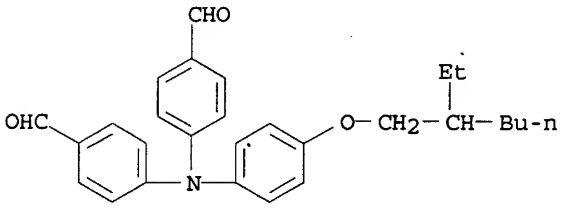
CC 35-5 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 37, 73, 76
IT 437769-73-8P 450944-94-2P **450944-95-3P** 450944-96-4P
450944-97-5P 450944-98-6P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(electroluminescent polymers possessing both hole and electron-transporting units in the main chain)

L83 ANSWER 13 OF 46 HCAPLUS COPYRIGHT 2005 ACS on STN
2002:255327 Document No. 137:33628 Novel bipolar light-emitting copolymer containing triazole and triphenylamine moieties. Liu, Ze; Zhang, Yanguang; Hu, Yufeng; Su, Guangping; Ma, Dongge; Wang, Lixiang; Jing, Xiabin; Wang, Fosong (State Key Laboratory of Polymer Physics and Chemistry, Changchun Institute of Applied Chemistry, Chinese Academy of Sciences, Changchun, 130022, Peop. Rep. China). Journal of Polymer Science, Part A: Polymer Chemistry, 40(8), 1122-1126 (English) 2002. CODEN: JPACEC. ISSN: 0887-624X. Publisher: John Wiley & Sons, Inc..
IT **437769-72-7P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and solubility and thermal stability of bipolar luminescent polyphenylenevinylene containing triazole and triphenylamine moieties)
RN 437769-72-7 HCAPLUS

CN Benzaldehyde, 4,4'-[[4-[(2-ethylhexyl)oxy]phenyl]imino]bis-, polymer with 4-phenyl-3,5-bis[4-[(tributylchlorophosphoranyl)methyl]phenyl]-4H-1,2,4-triazole (9CI) (CA INDEX NAME)

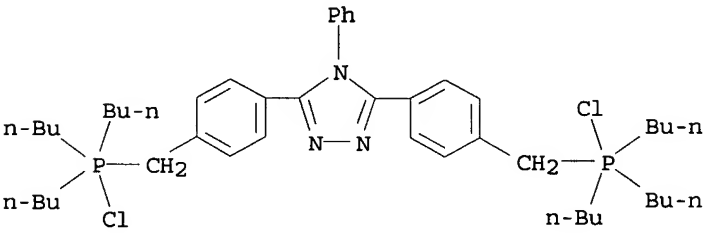
CM 1

CRN 437769-71-6
CMF C28 H31 N O3



CM 2

CRN 437769-70-5
CMF C46 H71 Cl2 N3 P2



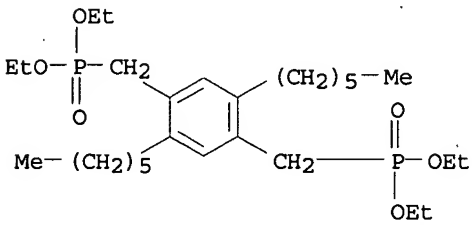
CC 35-5 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 36, 73
IT **437769-72-7P** 437769-73-8P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and solubility and thermal stability of bipolar luminescent polyphenylenevinylene containing triazole and triphenylamine moieties)

L83 ANSWER 14 OF 46 HCAPLUS COPYRIGHT 2005 ACS on STN
2002:173834 Document No. 137:63566 Synthesis and characterization of poly(p-phenylenevinylene) based alternating copolymers for light emitting diodes. Jin, Sung-Ho; Jung, Joong-Eun; Yeom, In-Suk; Moon, Seong-Bae; Koh, Kwangnak; Kim, Sung-Hoon; Gal, Yeong-Soon (Department of Chemistry Education, Pusan National University, Pusan, 609-735, S. Korea). European Polymer Journal, 38(5), 895-901 (English) 2002. CODEN: EUPJAG. ISSN: 0014-3057. Publisher: Elsevier Science Ltd..
IT **438590-56-8P**, 4,4'-Diformyltriphenylamine-2,5-dihexyl-1,4-xylylenebis(diethylphosphonate) copolymer**438590-57-9P**, 4,4'-Diformyltriphenylamine-2-methoxy-5-(2'-ethylhexyloxy)-1,4-xylylenebis(diethylphosphonate) copolymer
RL: DEV (Device component use); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(preparation and electrooptical properties of poly(p-phenylenevinylene-aminophenylene)s and use as emitter/transport layer in light emitting diodes)
RN 438590-56-8 HCAPLUS

CN Phosphonic acid, [(2,5-dihexyl-1,4-phenylene)bis(methylene)]bis-, tetraethyl ester, polymer with 4,4'-(phenylimino)bis[benzaldehyde] (9CI) (CA INDEX NAME)

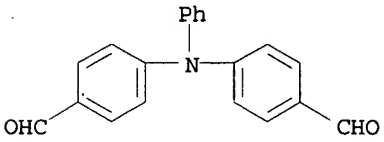
CM 1

CRN 438590-54-6
CMF C28 H52 O6 P2



CM 2

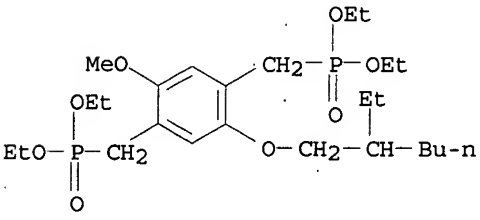
CRN 53566-95-3
CMF C20 H15 N O2



RN 438590-57-9 HCAPLUS
CN Phosphonic acid, [[2-[(2-ethylhexyl)oxy]-5-methoxy-1,4-phenylene]bis(methylene)]bis-, tetraethyl ester, polymer with 4,4'-(phenylimino)bis[benzaldehyde] (9CI) (CA INDEX NAME)

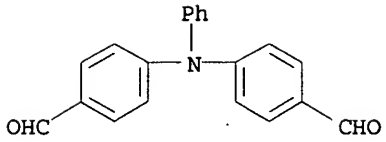
CM 1

CRN 181307-48-2
CMF C25 H46 O8 P2



CM 2

CRN 53566-95-3
CMF C20 H15 N O2

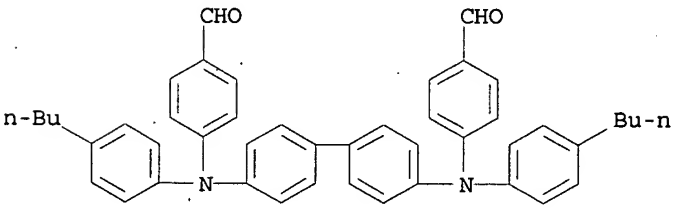


CC 35-7 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 36, 73, 76
IT 252669-29-7P **438590-56-8P**, 4,4'-Diformyltriphenylamine-2,5-dihexyl-1,4-xylylenebis(diethylphosphonate) copolymer
438590-57-9P, 4,4'-Diformyltriphenylamine-2-methoxy-5-(2'-ethylhexyloxy)-1,4-xylylenebis(diethylphosphonate) copolymer
439101-62-9P, 4,4'-Diformyltriphenylamine-2,5-dihexyl-1,4-xylylenebis(diethylphosphonate) copolymer, SRU
RL: DEV (Device component use); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(preparation and electrooptical properties of poly(p-phenylenevinylene-aminophenylene)s and use as emitter/transport layer in light emitting diodes)

L83 ANSWER 15 OF 46 HCAPLUS COPYRIGHT 2005 ACS on STN
2002:96230 Document No. 136:279953 Femtosecond Third-Order Optical Nonlinearity of Conjugated Polymers Consisting of Fluorene and Tetraphenyldiaminobiphenyl Units: Structure-Property Relationships.
Zhan, Xiaowei; Liu, Yunqi; Zhu, Daoben; Huang, Wentao; Gong, Qihuang (Center for Molecular Science Institute of Chemistry, Chinese Academy of Sciences, Beijing, 100080, Peop. Rep. China). Journal of Physical Chemistry B, 106(8), 1884-1888 (English) 2002. CODEN: JPCBFK. ISSN: 1089-5647. Publisher: American Chemical Society.
IT **222310-65-8**
RL: PRP (Properties)
(third-order optical nonlinearity of conjugated polymers consisting of fluorene and tetraphenyldiaminobiphenyl units)
RN 222310-65-8 HCAPLUS
CN Phosphonic acid, [1,4-phenylenebis(methylene)]bis-, tetraethyl ester, polymer with 4,4'-[[1,1'-biphenyl]-4,4'-diylbis[(4-butylphenyl)imino]]bis[benzaldehyde] (9CI) (CA INDEX NAME)

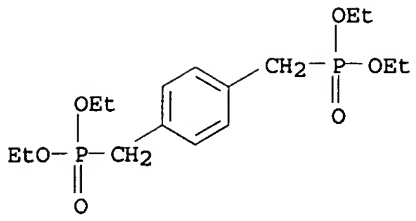
CM 1

CRN 216168-75-1
CMF C46 H44 N2 O2



CM 2

CRN 4546-04-7
CMF C16 H28 O6 P2

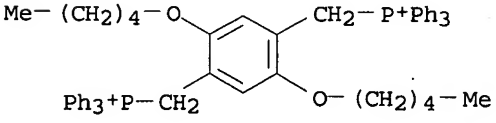


CC 36-5 (Physical Properties of Synthetic High Polymers)
Section cross-reference(s): 73
IT 188201-14-1 **222310-65-8** 222310-67-0 344782-51-0, 2,7-Diethynyl-9,9-di-2-ethylhexylfluorene-N,N'-diphenyl-N,N'-bis(4-bromophenyl)-1,1'-biphenyl-4,4'-diamine copolymer. 344782-53-2, 2,7-Diethynyl-9,9-di-2-ethylhexylfluorene-N,N'-diphenyl-N,N'-bis(4-bromophenyl)-1,1'-biphenyl-4,4'-diamine copolymer, sru 344782-55-4, 9,9-Di-2-ethylhexylfluorene-2,7-bis(trimethyleneboronate)-N,N'-diphenyl-N,N'-bis(4-bromophenyl)-1,1'-biphenyl-4,4'-diamine copolymer 344782-56-5, 9,9-Di-2-ethylhexylfluorene-2,7-bis(trimethyleneboronate)-N,N'-diphenyl-N,N'-bis(4-bromophenyl)-1,1'-biphenyl-4,4'-diamine copolymer, sru
RL: PRP (Properties)
(third-order optical nonlinearity of conjugated polymers consisting of fluorene and tetraphenyldiaminobiphenyl units)

L83 ANSWER 16 OF 46 HCAPLUS COPYRIGHT 2005 ACS on STN
2001:858566 Document No. 136:135411 Synthesis and characterization of a novel class of PPV derivatives covalently linked to C60. Xiao, Shengxiong; Wang, Shu; Fang, Hongjuan; Li, Yuliang; Shi, Zhiqiang; Du, Chimin; Zhu, Daoben (Center for Molecular Sciences, Institute of Chemistry, Chinese Academy of Sciences, Beijing, 100080, Peop. Rep. China). Macromolecular Rapid Communications, 22(16), 1313-1318 (English) 2001. CODEN: MRCOE3. ISSN: 1022-1336. Publisher: Wiley-VCH Verlag GmbH.
IT **391874-44-5P**
RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis and characterization of PPV derivs. covalently linked to C60)
RN 391874-44-5 HCAPLUS
CN Phosphonium, [[2,5-bis(pentyloxy)-1,4-phenylene]bis(methylene)]bis[triphenyl-, dibromide, polymer with 9-(3-azidopropyl)-9H-carbazole-3,6-dicarboxaldehyde and 4,4'-(phenylimino)bis[benzaldehyde] (9CI) (CA INDEX NAME)

CM 1

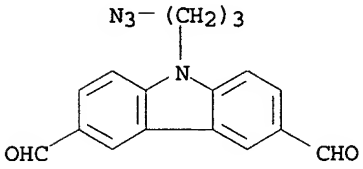
CRN 332865-19-7
CMF C54 H58 O2 P2 . 2 Br



●2 Br^-

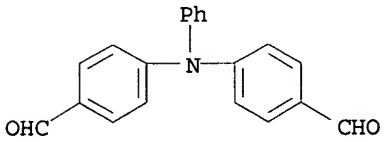
CM 2

CRN 332865-09-5
CMF C17 H14 N4 O2



CM 3

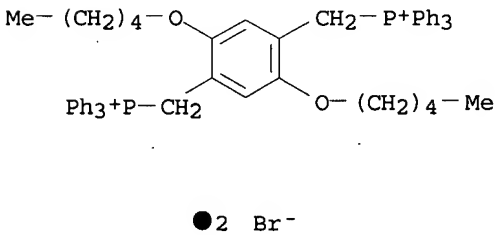
CRN 53566-95-3
CMF C20 H15 N O2



IT **391874-44-5DP**, reaction products with C60
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(synthesis and characterization of PPV derivs. covalently linked to C60)
RN 391874-44-5 HCAPLUS
CN Phosphonium, [[2,5-bis(pentyloxy)-1,4-phenylene]bis(methylene)]bis[triphenyl-, dibromide, polymer with 9-(3-azidopropyl)-9H-carbazole-3,6-dicarboxaldehyde and 4,4'-(phenylimino)bis[benzaldehyde] (9CI) (CA INDEX NAME)

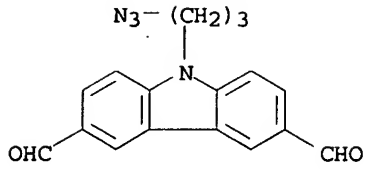
CM 1

CRN 332865-19-7
CMF C54 H58 O2 P2 . 2 Br



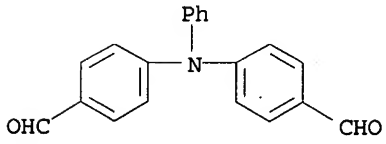
CM 2

CRN 332865-09-5
CMF C17 H14 N4 O2



CM 3

CRN 53566-95-3
CMF C20 H15 N O2

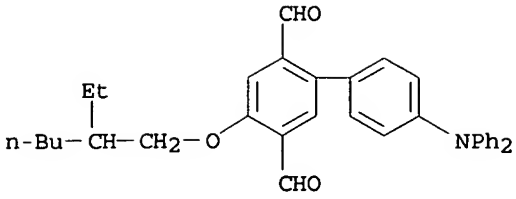


CC 37-3 (Plastics Manufacture and Processing)
IT 391874-34-3P **391874-44-5P**
RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis and characterization of PPV derivs. covalently linked to C60)
IT 99685-96-8DP, [5,6]Fullerene-C60-Ih, reaction products with PPV 391874-34-3DP, reaction products with C60**391874-44-5DP**, reaction products with C60
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(synthesis and characterization of PPV derivs. covalently linked to C60)

L83 ANSWER 17 OF 46 HCAPLUS COPYRIGHT 2005 ACS on STN
2001:787644 Document No. 136:86146 A Novel Triphenylamine-Substituted Poly(p-phenylenevinylene): Improved Photo- and Electroluminescent Properties. Pu, Yong-Jin; Soma, Minoru; Kido, Junji; Nishide, Hiroyuki (Department of Applied Chemistry, Waseda University, Shinjuku Tokyo, 169-8555, Japan). Chemistry of Materials, 13(11), 3817-3819 (English) 2001. CODEN: CMATEX. ISSN: 0897-4756. Publisher: American Chemical Society.
IT **385395-44-8P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation of triphenylamine-substituted poly(p-phenylenevinylene) with high photoluminescence efficiency)
RN 385395-44-8 HCAPLUS
CN Phosphonic acid, [[2-[(2-ethylhexyl)oxy]-5-methoxy-1,4-phenylene]bis(methylene)]bis-, tetraethyl ester, polymer with 4'-(diphenylamino)-4-[(2-ethylhexyl)oxy][1,1'-biphenyl]-2,5-dicarboxaldehyde (9CI) (CA INDEX NAME)

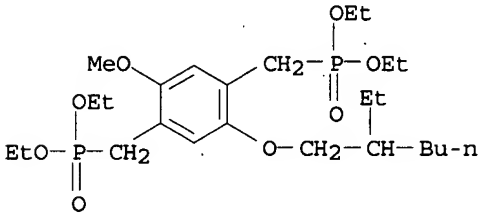
CM 1

CRN 385395-43-7
CMF C34 H35 N O3



CM 2

CRN 181307-48-2
CMF C25 H46 O8 P2

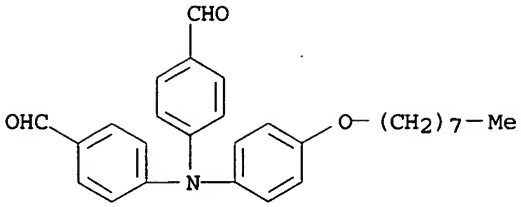


CC 35-5 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 36, 73
IT **385395-44-8P** 386264-44-4P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation of triphenylamine-substituted poly(p-phenylenevinylene) with high photoluminescence efficiency)

L83 ANSWER 18 OF 46 HCAPLUS COPYRIGHT 2005 ACS on STN
2001:670075 Document No. 136:6454 Synthesis and characterization of alternating copolymers containing triphenylamine as hole-transporting units. Li, Hongchao; Geng, Yanhou; Tong, Shuwen; Tong, Hui; Hua, Rong; Su, Guangping; Wang, Lixiang; Jing, Xiabin; Wang, Fosong (State Key Laboratory of Polymer Physics and Chemistry, Changchun Institute of Applied Chemistry, Chinese Academy of Sciences, Changchun, 130022, Peop. Rep. China). Journal of Polymer Science, Part A: Polymer Chemistry, 39(19), 3278-3286 (English) 2001. CODEN: JPACEC. ISSN: 0887-624X. Publisher: John Wiley & Sons, Inc..
IT **374630-37-2P 374630-41-8P 374630-44-1P 374630-47-4P 374630-50-9P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(synthesis and characterization of alternating copolymers containing triphenylamine as hole-transporting units)
RN 374630-37-2 HCAPLUS
CN Phosphonium, [1,4-phenylenebis(methylene)]bis[tributyl-, dichloride, polymer with 4,4'-[[4-(octyloxy)phenyl]imino]bis[benzaldehyde] (9CI) (CA INDEX NAME)

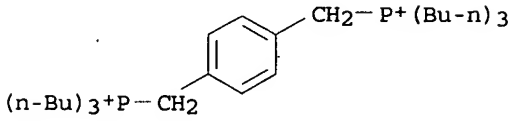
CM 1

CRN 350576-80-6
CMF C28 H31 N O3



CM 2

CRN 79428-94-7
CMF C32 H62 P2 . 2 Cl

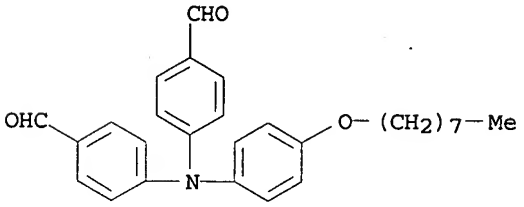


●2 Cl-

RN 374630-41-8 HCAPLUS
CN Phosphonium, [1,3-phenylenebis(methylene)]bis[tributyl-, dichloride, polymer with 4,4'-[[4-(octyloxy)phenyl]imino]bis[benzaldehyde] (9CI) (CA INDEX NAME)

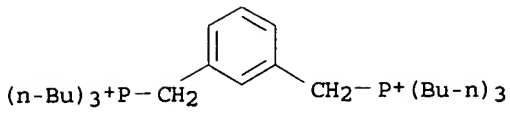
CM 1

CRN 350576-80-6
CMF C28 H31 N O3



CM 2

CRN 163342-77-6
CMF C32 H62 P2 . 2 Cl

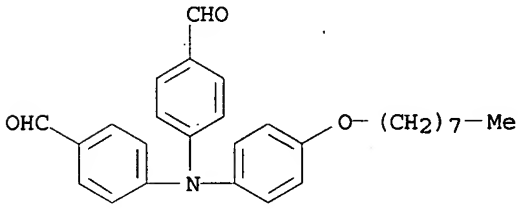


●2 Cl⁻

RN 374630-44-1 HCAPLUS
CN Phosphonium, [[2-[(2-ethylhexyl)oxy]-5-methoxy-1,4-phenylene]bis(methylene)]bis[tributyl-, dichloride, polymer with 4,4'-[[4-(octyloxy)phenyl]imino]bis[benzaldehyde] (9CI) (CA INDEX NAME)

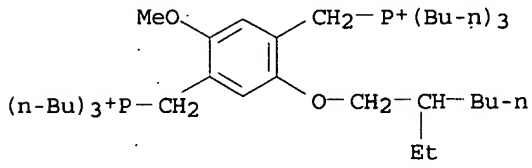
CM 1

CRN 350576-80-6
CMF C28 H31 N O3



CM 2

CRN 252338-05-9
CMF C41 H80 O2 P2 . 2 Cl

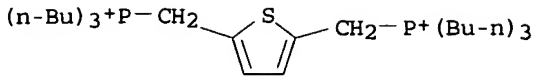


●2 Cl⁻

RN 374630-47-4 HCAPLUS
CN Phosphonium, [2,5-thiophenediylbis(methylene)]bis[tributyl-, dichloride, polymer with 4,4'-[[4-(octyloxy)phenyl]imino]bis[benzaldehyde] (9CI) (CA INDEX NAME)

CM 1

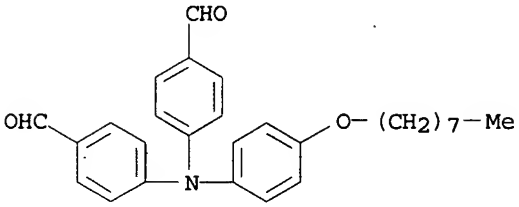
CRN 374630-33-8
CMF C30 H60 P2 S . 2 Cl



●2 Cl^-

CM 2

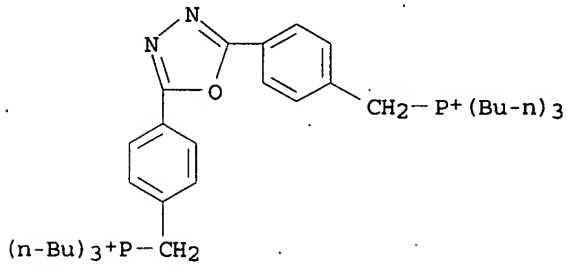
CRN 350576-80-6
CMF C28 H31 N O3



RN 374630-50-9 HCAPLUS
CN Phosphonium, [1,3,4-oxadiazole-2,5-diylbis(4,1-phenylenemethylene)]bis[tributyl-, dibromide, polymer with 4,4'-[[4-(octyloxy)phenyl]imino]bis[benzaldehyde] (9CI) (CA INDEX NAME)

CM 1

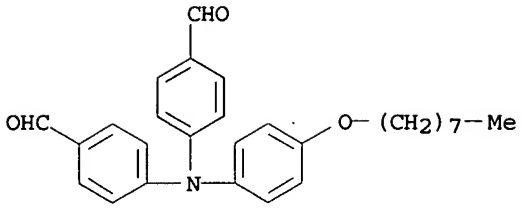
CRN 374630-35-0
CMF C40 H66 N2 O P2 . 2 Br



●2 Br^-

CM 2

CRN 350576-80-6
CMF C28 H31 N O3

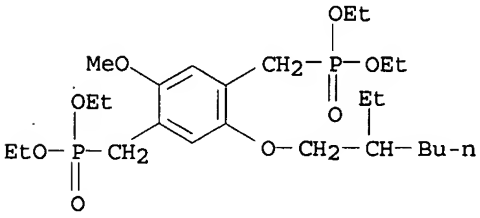


CC 35-7 (Chemistry of Synthetic High Polymers)
IT 350576-82-8P 350576-85-1P 350576-90-8P 350576-93-1P
374630-37-2P 374630-41-8P 374630-44-1P
374630-47-4P 374630-50-9P 374813-37-3P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(synthesis and characterization of alternating copolymers containing triphenylamine as hole-transporting units)

L83 ANSWER 19 OF 46 HCAPLUS COPYRIGHT 2005 ACS on STN
2001:633272 Document No. 136:217293 Traveling-wave lasing of some triphenylamine-based polymers. Penzkofer, A.; Holzer, W.; Horhold, H.-H.; Tillmann, H.; Raabe, D.; Helbig, M. (Institut II - Experimentelle und Angewandte Physik, Universitat Regensburg, Regensburg, D-93053, Germany). Proceedings of the International Conference on Lasers, 23rd, 523-529 (English) 2000. CODEN: PICLDV. ISSN: 0190-4132. Publisher: STS Press.
IT **350704-93-7 374723-19-0 391257-49-1**
401498-82-6 401498-88-2 401498-95-1
401499-00-1
RL: PRP (Properties)
(traveling-wave lasing and amplification of spontaneous emission of triphenylamine-phenylenevinylene conjugated polymers)
RN 350704-93-7 HCAPLUS
CN Phosphonic acid, [[2-[(2-ethylhexyl)oxy]-5-methoxy-1,4-phenylene]bis(methylene)]bis-, tetraethyl ester, polymer with 4,4'-[[1,1'-biphenyl]-4,4'-diylbis[(4-methylphenyl)imino]]bis[benzaldehyde] and 2,5-dimethoxy-1,4-benzenedicarboxaldehyde (9CI) (CA INDEX NAME)

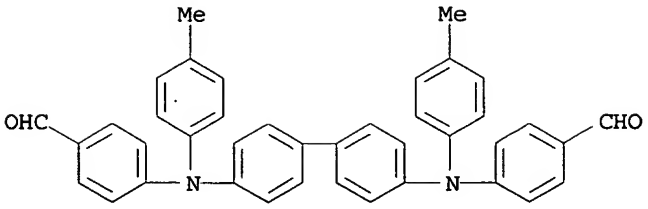
CM 1

CRN 181307-48-2
CMF C25 H46 O8 P2



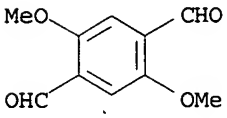
CM 2

CRN 181064-88-0
CMF C40 H32 N2 O2



CM 3

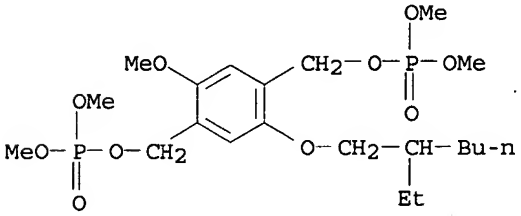
CRN 7310-97-6
CMF C10 H10 O4



RN 374723-19-0 HCAPLUS
CN Phosphoric acid, [2-[(2-ethylhexyl)oxy]-5-methoxy-1,4-phenylene]bis(methylene) tetramethyl ester, polymer with 4,4'-(phenylimino)bis[benzaldehyde] (9CI) (CA INDEX NAME)

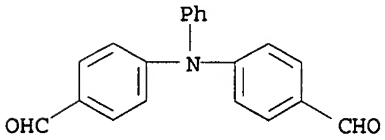
CM 1

CRN 374723-18-9
CMF C21 H38 O10 P2



CM 2

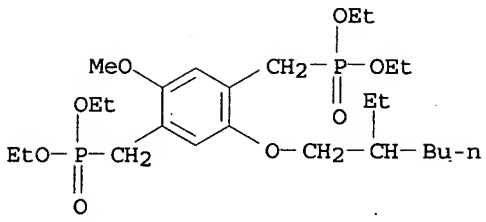
CRN 53566-95-3
CMF C20 H15 N O2



RN 391257-49-1 HCAPLUS
CN Phosphonic acid, [[2-[(2-ethylhexyl)oxy]-5-methoxy-1,4-phenylene]bis(methylene)]bis-, tetraethyl ester, polymer with 4,4'-[[1,1'-biphenyl]-4,4'-diylbis[(4-methylphenyl)imino]]bis[benzaldehyde] (9CI) (CA INDEX NAME)

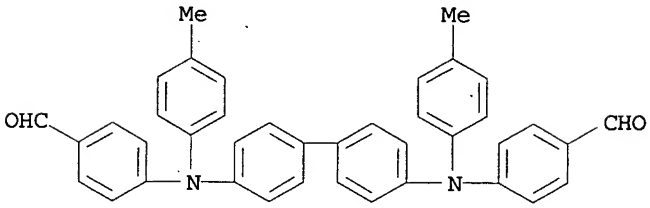
CM 1

CRN 181307-48-2
CMF C25 H46 O8 P2



CM 2

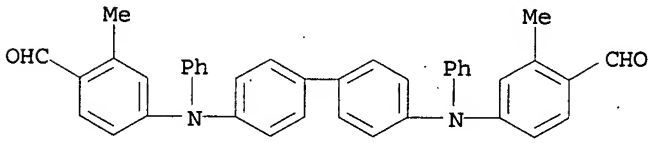
CRN 181064-88-0
CMF C40 H32 N2 O2



RN 401498-82-6 HCAPLUS
CN Phosphonic acid, [[2,5-bis(octyloxy)-1,4-phenylene]bis(methylene)]bis-, tetraethyl ester, polymer with 4,4'-[[1,1'-biphenyl]-4,4'-diylbis(phenylimino)]bis[2-methylbenzaldehyde] (9CI) (CA INDEX NAME)

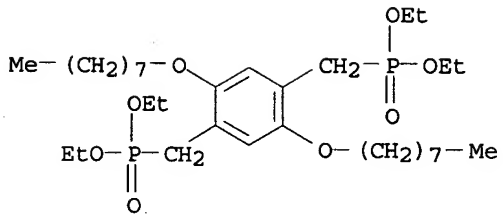
CM 1

CRN 217632-50-3
CMF C40 H32 N2 O2



CM 2

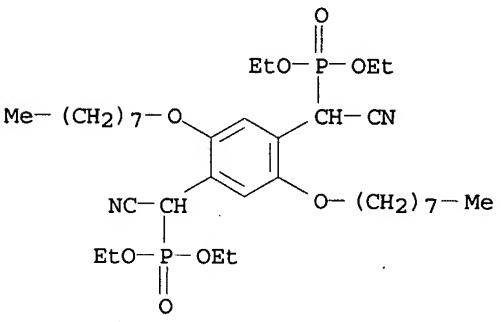
CRN 176856-31-8
CMF C32 H60 O8 P2



RN 401498-88-2 HCAPLUS
CN Phosphonic acid, [[2,5-bis(octyloxy)-1,4-phenylene]bis(cyanomethylene)]bis-, tetraethyl ester, polymer with 4,4'-[[1,1'-biphenyl]-4,4'-diylbis(phenylimino)]bis[2-methylbenzaldehyde] (9CI) (CA INDEX NAME)

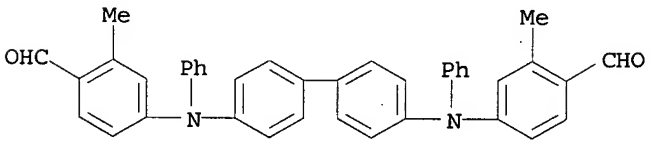
CM 1

CRN 401498-87-1
CMF C34 H58 N2 O8 P2



CM 2

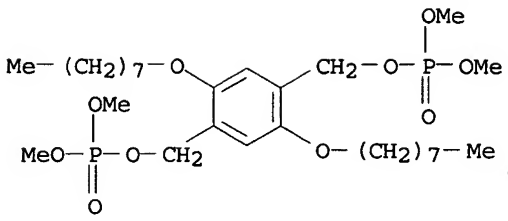
CRN 217632-50-3
CMF C40 H32 N2 O2



RN 401498-95-1 HCAPLUS
CN Phosphoric acid, [2,5-bis(octyloxy)-1,4-phenylene]bis(methylene) tetramethyl ester, polymer with 4,4'-(phenylimino)bis[benzaldehyde] (9CI) (CA INDEX NAME)

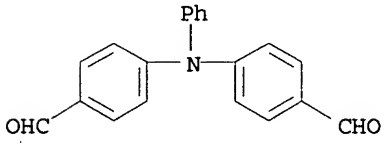
CM 1

CRN 401498-94-0
CMF C28 H52 O10 P2



CM 2

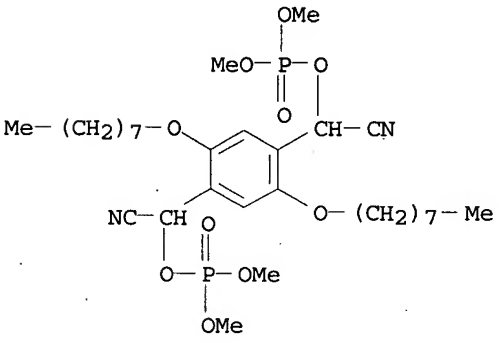
CRN 53566-95-3
CMF C20 H15 N O2



RN 401499-00-1 HCAPLUS
CN Phosphoric acid, [2,5-bis(octyloxy)-1,4-phenylene]bis(cyanomethylene) tetramethyl ester, polymer with 4,4'-(phenylimino)bis[benzaldehyde] (9CI) (CA INDEX NAME)

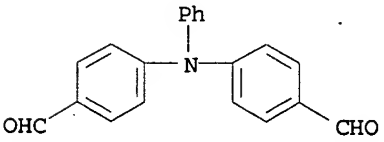
CM 1

CRN 401498-99-5
CMF C30 H50 N2 O10 P2



CM 2

CRN 53566-95-3
CMF C20 H15 N O2



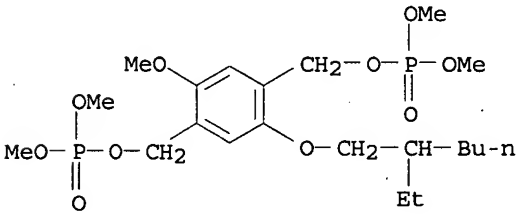
CC 36-5 (Physical Properties of Synthetic High Polymers)

Section cross-reference(s): 73
IT 188744-21-0 189075-52-3 203448-68-4 252669-29-7 256523-99-6
350704-93-7 374723-19-0 391257-49-1
391257-51-5 391257-52-6 391257-54-8**401498-82-6**
401498-88-2 401498-90-6 **401498-95-1**
401499-00-1 401499-02-3
RL: PRP (Properties)
(traveling-wave lasing and amplification of spontaneous emission of triphenylamine-phenylenevinylene conjugated polymers)

L83 ANSWER 20 OF 46 HCAPLUS COPYRIGHT 2005 ACS on STN
2001:592977 Document No. 136:6766 Electroluminescence enhancement by blending PVK with an alternating copolymer containing triphenylamine and phenylene units. Qiu, Y.; Duan, L.; Hu, X.; Zhang, D.; Zheng, M.; Bai, F. (Department of Chemistry, Tsinghua University, Beijing, 100084, Peop. Rep. China). Synthetic Metals, 123(1), 39-42 (English) 2001. CODEN: SYMEDZ. ISSN: 0379-6779. Publisher: Elsevier Science S.A..
IT **374723-19-0D**, thermally converted
RL: DEV (Device component use); POF (Polymer in formulation); PRP (Properties); USES (Uses)
(electroluminescence and photoluminescence of triphenylamine-containing polyphenylenevinylene blends with poly(vinylcarbazole))
RN 374723-19-0 HCAPLUS
CN Phosphoric acid, [2-[(2-ethylhexyl)oxy]-5-methoxy-1,4-phenylene]bis(methylene) tetramethyl ester, polymer with 4,4'-(phenylimino)bis[benzaldehyde] (9CI) (CA INDEX NAME)

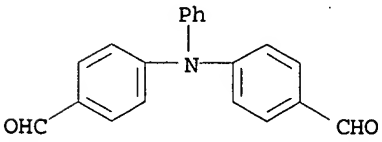
CM 1

CRN 374723-18-9
CMF C21 H38 O10 P2



CM 2

CRN 53566-95-3
CMF C20 H15 N O2



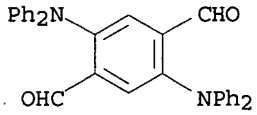
CC 37-5 (Plastics Manufacture and Processing)
Section cross-reference(s): 38, 73
IT 25067-59-8, Poly(vinylcarbazole) 252669-29-7**374723-19-0D**
, thermally converted
RL: DEV (Device component use); POF (Polymer in formulation); PRP (Properties); USES (Uses)
(electroluminescence and photoluminescence of

triphenylamine-containing polyphenylenevinylene blends with poly(vinylcarbazole))

L83 ANSWER 21 OF 46 HCAPLUS COPYRIGHT 2005 ACS on STN
2001:582418 Document No. 135:336416. Conjugated polymers containing arylamine pendants for light-emitting diodes. Shi, Jianmin; Zheng, Shiying (Research & Development, Eastman Kodak Company, Rochester, NY, 14650, USA). Macromolecules, 34(19), 6571-6576 (English) 2001. CODEN: MAMOBX. ISSN: 0024-9297. Publisher: American Chemical Society.
IT **369370-73-0P 369370-74-1P 369370-75-2P**
RL: DEV (Device component use); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(preparation and application of conjugated polymers containing arylamine pendant group for light-emitting diodes)
RN 369370-73-0 HCAPLUS
CN Phosphonic acid, [[2-[(3,7-dimethyloctyl)oxy]-5-methoxy-1,4-phenylene]bis(methylene)]bis-, tetraethyl ester, polymer with 2,5-bis(diphenylamino)-1,4-benzenedicarboxaldehyde (9CI) (CA INDEX NAME)

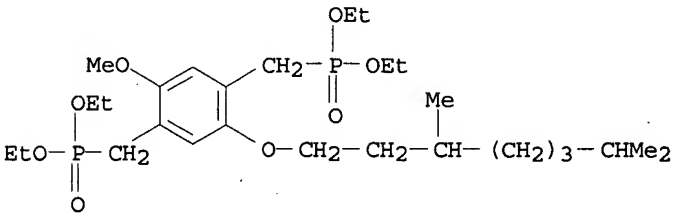
CM 1

CRN 369370-66-1
CMF C32 H24 N2 O2



CM 2

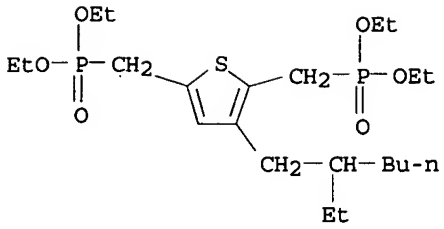
CRN 287919-01-1
CMF C27 H50 O8 P2



RN 369370-74-1 HCAPLUS
CN Phosphonic acid, [[3-(2-ethylhexyl)-2,5-thiophenediyl]bis(methylene)]bis-, tetraethyl ester, polymer with 2,5-bis(diphenylamino)-1,4-benzenedicarboxaldehyde (9CI) (CA INDEX NAME)

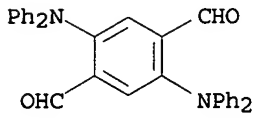
CM 1

CRN 656812-97-4
CMF C22 H42 O6 P2 S



CM 2

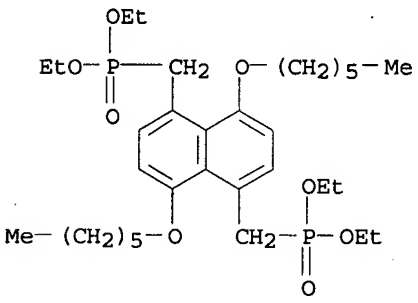
CRN 369370-66-1
CMF C32 H24 N2 O2



RN 369370-75-2 HCAPLUS
CN Phosphonic acid, [[4,8-bis(hexyloxy)-1,4-naphthalenediyl]bis(methylene)]bis-, tetraethyl ester, polymer with 2,5-bis(diphenylamino)-1,4-benzenedicarboxaldehyde (9CI) (CA INDEX NAME)

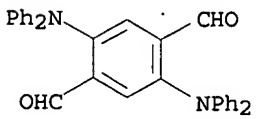
CM 1

CRN 369370-69-4
CMF C32 H54 O8 P2



CM 2

CRN 369370-66-1
CMF C32 H24 N2 O2

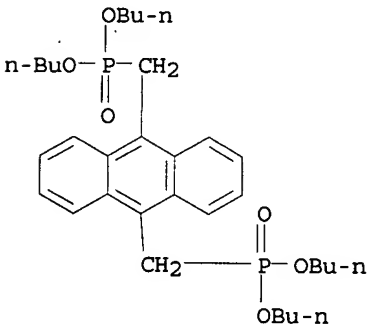


CC 73-5 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
Section cross-reference(s): 38, 76
IT 369370-71-8P 369370-72-9P **369370-73-0P**
369370-74-1P 369370-75-2P 369370-76-3P
369385-54-6P 369385-63-7P
RL: DEV (Device component use); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(preparation and application of conjugated polymers containing arylamine pendant group for light-emitting diodes)

L83 ANSWER 22 OF 46 HCAPLUS COPYRIGHT 2005 ACS on STN
2001:555772 Document No. 135:280342 Direct evidence of photoinduced charge transfer from alternating copolymer to buckminsterfullerene. Yang, Junlin; Bai, Fenglian; Lin, Hongzhen; Zheng, Min; Zhang, Yueping; Li, Yuliang; Sun, Jian; Liu, Yang; Zhu, Daoben (Laboratory of Organic Solids, The Center for Molecular Science, Institute of Chemistry, Chinese Academy of Sciences, Beijing, 100080, Peop. Rep. China). Macromolecular Chemistry and Physics, 202(9), 1824-1828 (English) 2001. CODEN: MCHPES. ISSN: 1022-1352. Publisher: Wiley-VCH Verlag GmbH.
IT **252349-52-3P**
RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(in synthesis of copolymer)
RN 252349-52-3 HCAPLUS
CN Phosphonic acid, [9,10-anthracenediylbis(methylene)]bis-, tetrabutyl ester, polymer with 4,4'-(phenylimino)bis[benzaldehyde] (9CI) (CA INDEX NAME)

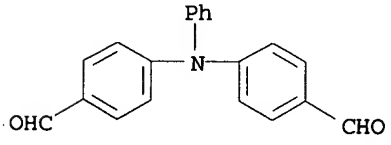
CM 1

CRN 252349-51-2
CMF C32 H48 O6 P2



CM 2

CRN 53566-95-3
CMF C20 H15 N O2



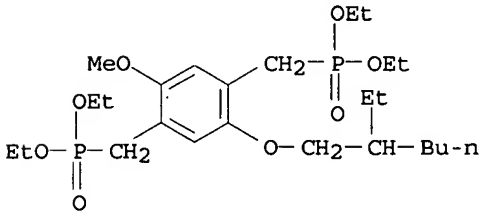
CC 74-1 (Radiation Chemistry, Photochemistry, and Photographic and

Other Reprographic Processes)
Section cross-reference(s): 36, 73
IT 603-34-9P, Triphenylamine 10387-13-0P, 9,10-Bis(chloromethyl)anthracene 53566-95-3P **252349-52-3P**
RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(in synthesis of copolymer)

L83 ANSWER 23 OF 46 HCAPLUS COPYRIGHT 2005 ACS on STN
2001:400162 Document No. 136:151769 Synthesis of TPD-containing polymers for use as light-emitting materials in electroluminescent and laser devices. Hoerhold, Hans-Heinrich; Tillmann, Hartwig; Raabe, Dietrich; Helbig, Manfred; Elflein, Wilhelm; Braeuer, Andreas H.; Holzer, Wolfgang; Penzkofer, Alfons (INNOVENT Technologieentwicklung e. V., Jena, 07745, Germany). Proceedings of SPIE-The International Society for Optical Engineering, 4105(Organic Light-Emitting Materials and Devices IV), 431-442 (English) 2001. CODEN: PSISDG. ISSN: 0277-786X. Publisher: SPIE-The International Society for Optical Engineering.
IT **350704-93-7P**, N,N'-Bis(4-formylphenyl)-N,N'-bis(4-methylphenyl)benzidine-2,5-dimethoxyterephthalaldehyde-2-Methoxy-5-(2-ethylhexyloxy)-1,4-xylylenebis(diethylphosphonate) copolymer **391257-49-1P**
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(synthesis of aromatic polymers for use as light-emitting materials in electroluminescent and laser devices)
RN 350704-93-7 HCAPLUS
CN Phosphonic acid, [[2-[(2-ethylhexyl)oxy]-5-methoxy-1,4-phenylene]bis(methylene)]bis-, tetraethyl ester, polymer with 4,4'-[[1,1'-biphenyl]-4,4'-diylbis[(4-methylphenyl)imino]]bis[benzaldehyde] and 2,5-dimethoxy-1,4-benzenedicarboxaldehyde (9CI) (CA INDEX NAME)

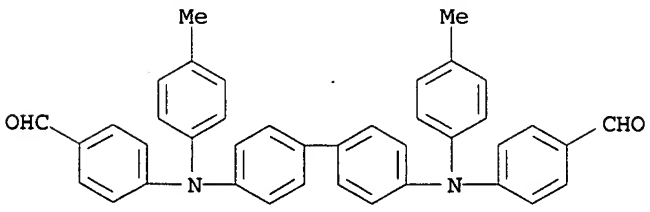
CM 1

CRN 181307-48-2
CMF C25 H46 O8 P2



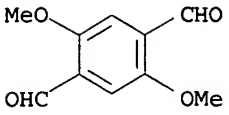
CM 2

CRN 181064-88-0
CMF C40 H32 N2 O2



CM 3

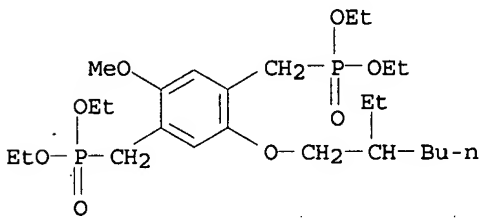
CRN 7310-97-6
CMF C10 H10 O4



RN 391257-49-1 HCAPLUS
CN Phosphonic acid, [[2-[(2-ethylhexyl)oxy]-5-methoxy-1,4-phenylene]bis(methylene)]bis-, tetraethyl ester, polymer with 4,4'-[[1,1'-biphenyl]-4,4'-diylbis[(4-methylphenyl)imino]]bis[benzaldehyde] (9CI) (CA INDEX NAME)

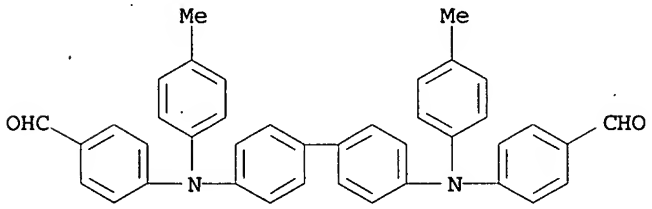
CM 1

CRN 181307-48-2
CMF C25 H46 O8 P2



CM 2

CRN 181064-88-0
CMF C40 H32 N2 O2



CC 37-3 (Plastics Manufacture and Processing)
Section cross-reference(s): 73
IT **350704-93-7P**, N,N'-Bis(4-formylphenyl)-N,N'-bis(4-methylphenyl)benzidine-2,5-dimethoxyterephthalaldehyde-2-Methoxy-5-(2-ethylhexyloxy)-1,4-xylylenebis(diethylphosphonate) copolymer 391257-47-9P 391257-48-0P **391257-49-1P** 391257-51-5P, 1,4-Bis(phenylhydroxymethyl)benzene-N,N'-bis(4-methylphenyl)-N,N'-diphenylbenzidine copolymer 391257-52-6P 391257-54-8P
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(synthesis of aromatic polymers for use as light-emitting materials in electroluminescent and laser devices)

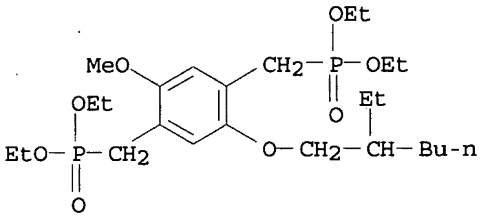
L83 ANSWER 24 OF 46 HCAPLUS COPYRIGHT 2005 ACS on STN
2001:355845 Document No. 135:122848 MEH-PPV and dialkoxy phenylene vinylene copolymers. Synthesis and lasing characterization. Horhold, H.-H.; Tillmann, H.; Bader, C.; Stockmann, R.; Nowotny, J.; Klemm, E.; Holzer, W.; Penzkofer, A. (INNOVENT, 07745 Jena, Institut fur Organische Chemie und Makromolekulare Chemie, Humblodtstrasse 10, Univ. Jena, Jena, 07743, Germany). Synthetic Metals, 119(1-3), 199-200 (English) 2001. CODEN: SYMEDZ. ISSN: 0379-6779. Publisher: Elsevier Science S.A..

IT **350704-93-7P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation of soluble MEH-PPV and dialkoxy phenylene vinylene conjugated polymers and traveling-wave lasing under pulse excitation)

RN 350704-93-7 HCAPLUS
CN Phosphonic acid, [[2-[(2-ethylhexyl)oxy]-5-methoxy-1,4-phenylene]bis(methylene)]bis-, tetraethyl ester, polymer with 4,4'-[[1,1'-biphenyl]-4,4'-diylbis[(4-methylphenyl)imino]]bis[benzaldehyde] and 2,5-dimethoxy-1,4-benzenedicarboxaldehyde (9CI) (CA INDEX NAME)

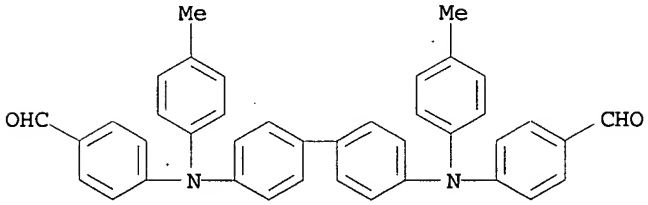
CM 1

CRN 181307-48-2
CMF C25 H46 O8 P2



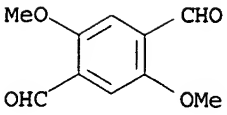
CM 2

CRN 181064-88-0
CMF C40 H32 N2 O2



CM 3

CRN 7310-97-6
CMF C10 H10 O4

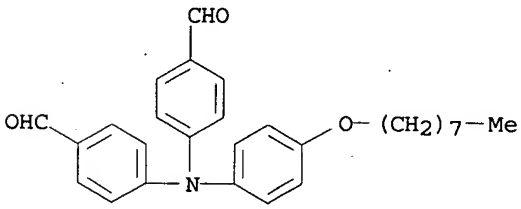


CC 35-5 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 36, 73
IT 138184-36-8P, MEH-PPV 240816-75-5P 240816-76-6P 245749-91-1P
350704-90-4P 350704-91-5P **350704-93-7P** 350831-46-8P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation of soluble MEH-PPV and dialkoxy phenylene vinylene conjugated polymers and traveling-wave lasing under pulse excitation)

L83 ANSWER 25 OF 46 HCAPLUS COPYRIGHT 2005 ACS on STN
2001:355820 Document No. 135:122844 Synthesis and properties of alternating copolymers containing PPV and hole-transporting units for light-emitting devices. Li, H. C.; Geng, Y. H.; Tong, S. W.; Xie, Z. Y.; Hua, R.; Su, G. P.; Wang, L. X.; Xing, X. B.; Wang, F. X. (State Key Lab. of Polymer Physics and Chemistry, CAS, Changchun Institute of Applied Chemistry, Changchun, 130022, Peop. Rep. China). Synthetic Metals, 119(1-3), 149-150 (English) 2001. CODEN: SYMEDZ. ISSN: 0379-6779. Publisher: Elsevier Science S.A..
IT **350576-81-7P 350576-84-0P 350576-87-3P**
350576-89-5P 350576-92-0P 350576-95-3P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(synthesis and properties of alternating copolymers containing PPV and hole-transporting units for light-emitting devices)
RN 350576-81-7 HCAPLUS
CN Phosphonium, [1,4-phenylenebis(methylene)]bis[tributyl-, polymer with 4,4'-[[4-(octyloxy)phenyl]imino]bis[benzaldehyde] (9CI) (CA INDEX NAME)

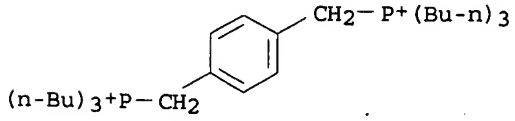
CM 1

CRN 350576-80-6
CMF C28 H31 N O3



CM 2

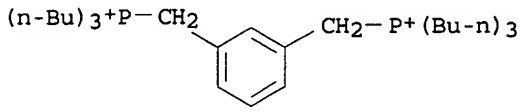
CRN 47740-63-6
CMF C32 H62 P2



RN 350576-84-0 HCAPLUS
CN Phosphonium, [1,3-phenylenebis(methylene)]bis[tributyl-, polymer with 4,4'-[[4-(octyloxy)phenyl]imino]bis[benzaldehyde] (9CI) (CA INDEX NAME)

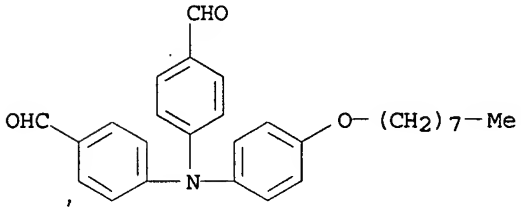
CM 1

CRN 350576-83-9
CMF C32 H62 P2



CM 2

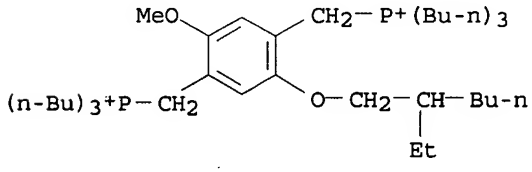
CRN 350576-80-6
CMF C28 H31 N O3



RN 350576-87-3 HCAPLUS
CN Phosphonium, [[2-[(2-ethylhexyl)oxy]-5-methoxy-1,4-phenylene]bis(methylene)]bis[tributyl-, polymer with 4,4'-[[4-(octyloxy)phenyl]imino]bis[benzaldehyde] (9CI) (CA INDEX NAME)

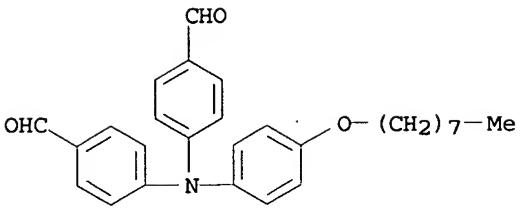
CM 1

CRN 350576-86-2
CMF C41 H80 O2 P2



CM 2

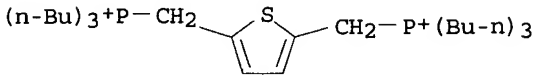
CRN 350576-80-6
CMF C28 H31 N O3



RN 350576-89-5 HCAPLUS
CN Phosphonium, [2,5-thiophenediylbis(methylene)]bis[tributyl-, polymer with 4,4'-[[4-(octyloxy)phenyl]imino]bis[benzaldehyde] (9CI) (CA INDEX NAME)

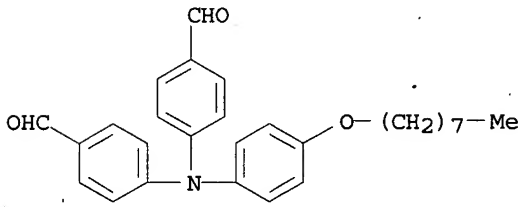
CM 1

CRN 350576-88-4
CMF C30 H60 P2 S



CM 2

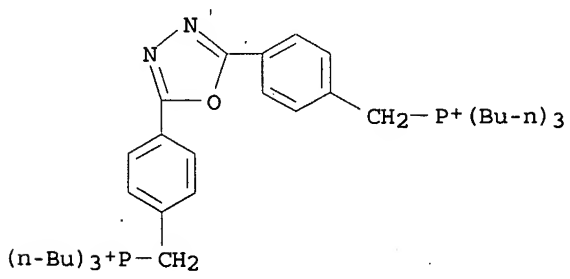
CRN 350576-80-6
CMF C28 H31 N O3



RN 350576-92-0 HCAPLUS
CN Phosphonium, [1,3,4-oxadiazole-2,5-diylbis(4,1-phenylenemethylene)]bis[tributyl-, polymer with 4,4'-[[4-(octyloxy)phenyl]imino]bis[benzaldehyde] (9CI) (CA INDEX NAME)

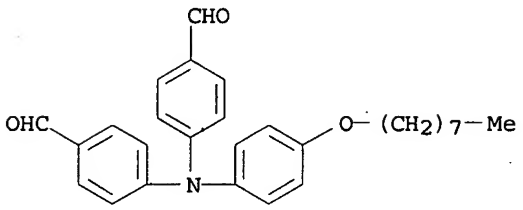
CM 1

CRN 350576-91-9
CMF C40 H66 N2 O P2



CM 2

CRN 350576-80-6
CMF C28 H31 N O3



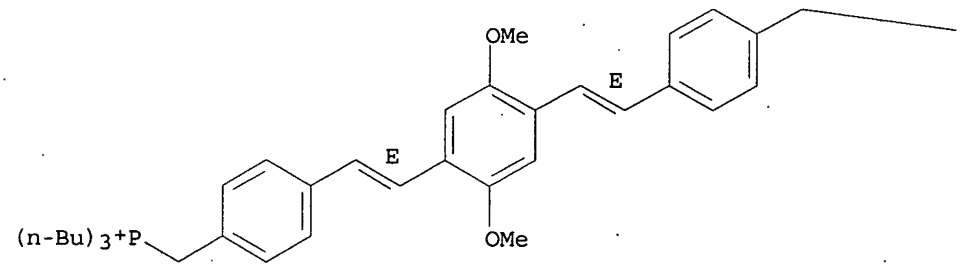
RN 350576-95-3 HCAPLUS
CN Phosphonium, [(2,5-dimethoxy-1,4-phenylene)bis[(1E)-1,2-ethenediyl-4,1-phenylenemethylene]]bis[tributyl-, polymer with 4,4'-[[4-(octyloxy)phenyl]imino]bis[benzaldehyde] (9CI) (CA INDEX NAME)

CM 1

CRN 350576-94-2
CMF C50 H78 O2 P2

Double bond geometry as shown.

PAGE 1-A

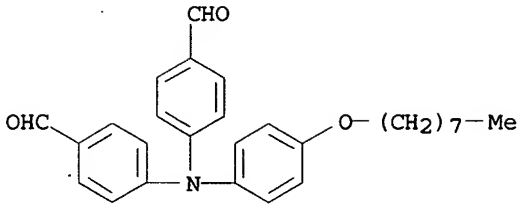


PAGE 1-B

— P+ (Bu-n) 3

CM 2

CRN 350576-80-6
CMF C28 H31 N O3

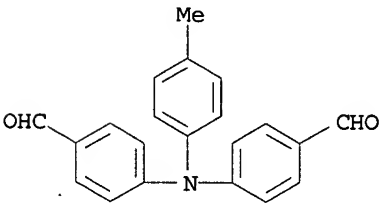


CC 35-5 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 73, 76
IT **350576-81-7P** 350576-82-8P **350576-84-0P**
350576-85-1P **350576-87-3P** **350576-89-5P**
350576-90-8P **350576-92-0P** 350576-93-1P
350576-95-3P 350576-96-4P 350685-93-7P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(synthesis and properties of alternating copolymers containing PPV and hole-transporting units for light-emitting devices)

L83 ANSWER 26 OF 46 HCAPLUS COPYRIGHT 2005 ACS on STN
2000:779700 Document No. 134:42528 Synthesis, magnetic, and optoelectronic properties of poly(triphenylamine-alt-phenylenevinylene)s. Pu, Yong-Jin; Soma, Minoru; Tsuchida, Eishun; Nishide, Hiroyuki (Department of Polymer Chemistry, Waseda University, Tokyo, 169-8555, Japan). Journal of Polymer Science, Part A: Polymer Chemistry, 38(22), 4119-4127 (English) 2000. CODEN: JPACEC. ISSN: 0887-624X. Publisher: John Wiley & Sons, Inc..
IT **313242-56-7P**, 4,4'-Diformyl-4''-methyltriphenylamine-1,4-xylenebis(diethylphosphonate) copolymer**313242-57-8P**, 4,4'-Diformyl-4''-methoxytriphenylamine-1,4-xylenebis(diethylphosphonate) copolymer**313242-58-9P**, 4,4'-Diformyl-4''-methyltriphenylamine-1,3-xylenebis(diethylphosphonate) copolymer**313242-59-0P**, 4,4'-Diformyl-4''-methoxytriphenylamine-1,3-xylenebis(diethylphosphonate) copolymer
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and reversible redox reaction and cationic radical domains of luminescent poly(triphenylamine-phenylene vinylene) conjugated polymers)
RN 313242-56-7 HCAPLUS
CN Phosphonic acid, [1,4-phenylenebis(methylene)]bis-, tetraethyl ester, polymer with 4,4'-[(4-methylphenyl)imino]bis[benzaldehyde] (9CI) (CA INDEX NAME)

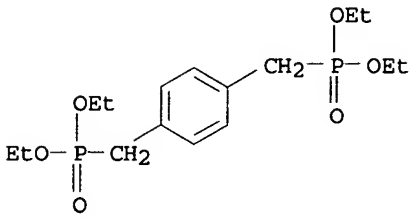
CM 1

CRN 122112-54-3
CMF C21 H17 N O2



CM 2

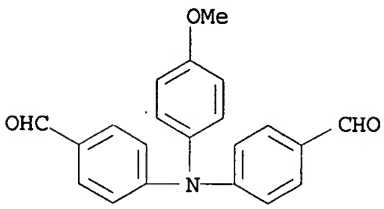
CRN 4546-04-7
CMF C16 H28 O6 P2



RN 313242-57-8 HCAPLUS
CN Phosphonic acid, [1,4-phenylenebis(methylene)]bis-, tetraethyl ester, polymer with 4,4'-[(4-methoxyphenyl)imino]bis[benzaldehyde] (9CI) (CA INDEX NAME)

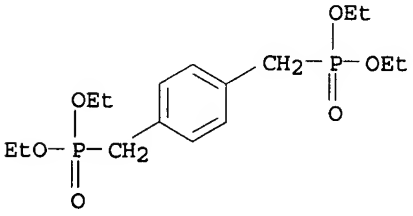
CM 1

CRN 149676-16-4
CMF C21 H17 N O3



CM 2

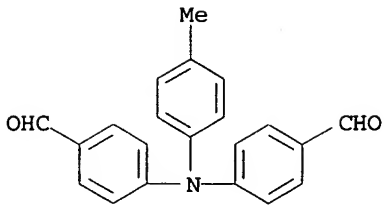
CRN 4546-04-7
CMF C16 H28 O6 P2



RN 313242-58-9 HCAPLUS
CN Phosphonic acid, [1,3-phenylenebis(methylene)]bis-, tetraethyl ester, polymer with 4,4'-[(4-methylphenyl)imino]bis[benzaldehyde] (9CI) (CA INDEX NAME)

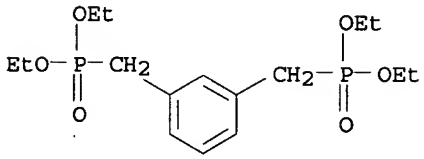
CM 1

CRN 122112-54-3
CMF C21 H17 N O2



CM 2

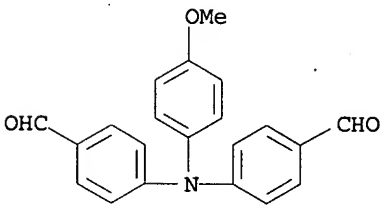
CRN 56875-38-8
CMF C16 H28 O6 P2



RN 313242-59-0 HCAPLUS
CN Phosphonic acid, [1,3-phenylenebis(methylene)]bis-, tetraethyl ester, polymer with 4,4'-[(4-methoxyphenyl)imino]bis[benzaldehyde] (9CI) (CA INDEX NAME)

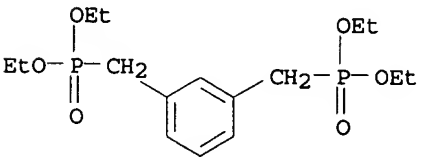
CM 1

CRN 149676-16-4
CMF C21 H17 N O3



CM 2

CRN 56875-38-8
CMF C16 H28 O6 P2



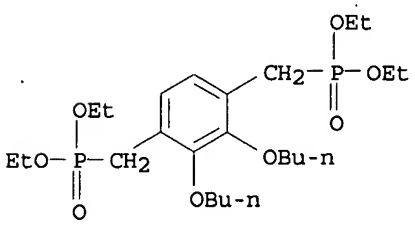
CC 35-5 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 36, 73, 76
IT 89119-13-1P 217632-29-6P 313242-54-5P, Poly(4-methoxytriphenylamine-alt-1,4-phenylene vinylene) 313242-55-6P,

Poly(4-methoxytriphenylamine-alt-1,3-phenylene vinylene) **313242-56-7P**, 4,4'-Diformyl-4''-methyltriphenylamine-1,4-xylenebis(diethylphosphonate) copolymer**313242-57-8P**, 4,4'-Diformyl-4''-methoxytriphenylamine-1,4-xylenebis(diethylphosphonate) copolymer**313242-58-9P**, 4,4'-Diformyl-4''-methyltriphenylamine-1,3-xylenebis(diethylphosphonate) copolymer**313242-59-0P**, 4,4'-Diformyl-4''-methoxytriphenylamine-1,3-xylenebis(diethylphosphonate) copolymer
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and reversible redox reaction and cationic radical domains of luminescent poly(triphenylamine-phenylene vinylene) conjugated polymers)

L83 ANSWER 27 OF 46 HCAPLUS COPYRIGHT 2005 ACS on STN
2000:420223 Document No. 133:157029 The copolymer route to new luminescent materials for LEDs. Chuah, Beng Sim; Geneste, Florence; Holmes, Andrew B.; Martin, Rainer E.; Rost, Henning; Cacialli, Franco; Friend, Richard H.; Horhold, Heinrich; Pfeiffer, Steffen; Hwang, Do-Hoon (Melville Laboratory for Polymer Synthesis, Department of Chemistry, University of Cambridge, Cambridge, CB2 3RA, UK). Macromolecular Symposia, 154(Polymers in Display Applications), 177-186 (English) 2000. CODEN: MSYMEC. ISSN: 1022-1360. Publisher: Wiley-VCH Verlag GmbH.
IT **287389-00-8P**
RL: DEV (Device component use); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(preparation and optoelectonic properties of polymer-based luminescent materials for LEDs)
RN 287389-00-8 HCAPLUS
CN Phosphonic acid, [(2,3-dibutoxy-1,4-phenylene)bis(methylene)]bis-, tetraethyl ester, polymer with 4,4'-(phenylimino)bis[benzaldehyde] (9CI) (CA INDEX NAME)

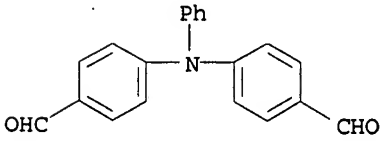
CM 1

CRN 208264-14-6
CMF C24 H44 O8 P2



CM 2

CRN 53566-95-3
CMF C20 H15 N O2



CC 73-5 (Optical, Electron, and Mass Spectroscopy and Other Related

Properties)
Section cross-reference(s): 38

IT 188744-21-0P 255059-62-2P 255059-64-4P 287388-91-4P
287388-93-6P 287388-95-8P 287388-97-0P 287388-98-1P
287388-99-2P **287389-00-8P**
RL: DEV (Device component use); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(preparation and optoelectonic properties of polymer-based luminescent materials for LEDs)

L83 ANSWER 28 OF 46 HCAPLUS COPYRIGHT 2005 ACS on STN
2000:153445 Document No. 132:322220 Design and synthesis of poly(p-phenylenevinylene) derivative with triphenylamine segments on polymer backbone. Xue, Minzhao; Huang, Deyin; Liu, Yangang (School of Chemistry and Chemical Engineering, Shanghai Jiao Tong University, Shanghai, Peop. Rep. China). Synthetic Metals, 110(3), 203-205 (English) 2000. CODEN: SYMEDZ. ISSN: 0379-6779.
Publisher: Elsevier Science S.A..

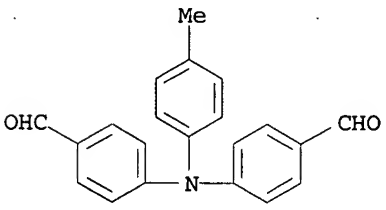
IT **267228-12-6P**, 4,4'-Diformyl-4''-methyl-triphenylamine-1,4-xylylene-bis(triphenylphosphonium bromide) copolymer
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and redox electrochem. and band structure of poly(p-phenylene vinylene-triphenylamine) luminescent conjugated polymer)

RN 267228-12-6 HCAPLUS

CN Phosphonium, [1,4-phenylenebis(methylene)]bis[triphenyl-, dibromide, polymer with 4,4'-[(4-methylphenyl)imino]bis[benzaldehyde] (9CI) (CA INDEX NAME)

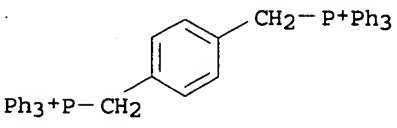
CM 1

CRN 122112-54-3
CMF C21 H17 N O2



CM 2

CRN 40817-03-6
CMF C44 H38 P2 . 2 Br



●2 Br⁻

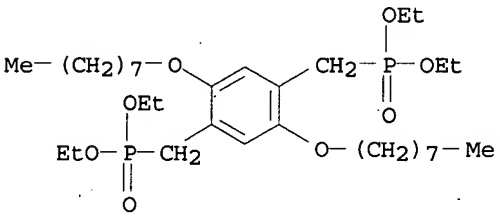
CC 35-5 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 36, 73

IT 89119-13-1P, 4,4'-Diformyl-4''-methyl-triphenylamine-1,4-xylylene-bis(triphenylphosphonium bromide) copolymer, SRU
267228-12-6P, 4,4'-Diformyl-4''-methyl-triphenylamine-1,4-xylylene-bis(triphenylphosphonium bromide) copolymer
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and redox electrochem. and band structure of poly(p-phenylene vinylene-triphenylamine) luminescent conjugated polymer)

L83 ANSWER 29 OF 46 HCAPLUS COPYRIGHT 2005 ACS on STN
1999:759907 Document No. 132:108411 Investigation of poly(arylenevinylene)s. Part 42. Synthesis of PPV-based copolymers containing alkyldiphenylamine and triphenylamine in the main chain. Pfeiffer, Steffen; Rost, Henning; Horhold, Hans-Heinrich (Institut Organische Chemie Makromolekulare Chemie, Friedrich-Schiller-Univ., Jena, D-07743, Germany). Macromolecular Chemistry and Physics, 200(11), 2471-2479 (English) 1999. CODEN: MCHPES. ISSN: 1022-1352. Publisher: Wiley-VCH Verlag GmbH.
IT **188744-19-6P 255059-68-8P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(synthesis and properties of poly(phenylenevinylene)s copolymers containing main-chain alkyldiphenylamine and triphenylamine)
RN 188744-19-6 HCAPLUS
CN Phosphonic acid, [[2,5-bis(octyloxy)-1,4-phenylene]bis(methylene)]bis-, tetraethyl ester, polymer with 4,4'-(phenylimino)bis[benzaldehyde] (9CI) (CA INDEX NAME)

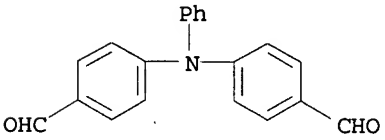
CM 1

CRN 176856-31-8
CMF C32 H60 O8 P2



CM 2

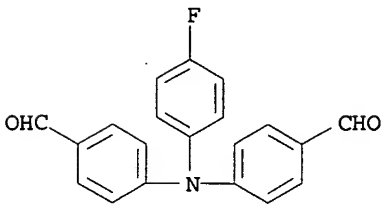
CRN 53566-95-3
CMF C20 H15 N O2



RN 255059-68-8 HCAPLUS
CN Phosphonic acid, [[2,5-bis(octyloxy)-1,4-phenylene]bis(methylene)]bis-, tetraethyl ester, polymer with 4,4'-[(4-fluorophenyl)imino]bis[benzaldehyde] (9CI) (CA INDEX NAME)

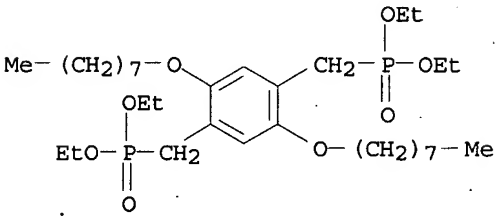
CM 1

CRN 189075-57-8
CMF C20 H14 F N O2



CM 2

CRN 176856-31-8
CMF C32 H60 O8 P2

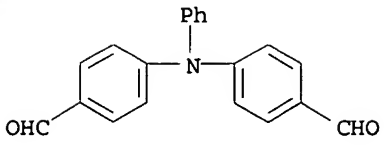


CC 35-5 (Chemistry of Synthetic High Polymers)
IT **188744-19-6P** 188744-21-0P 189075-60-3P 241495-47-6P
241495-48-7P 255059-62-2P 255059-63-3P 255059-64-4P
255059-66-6P **255059-68-8P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(synthesis and properties of poly(phenylenevinylene)s copolymers containing main-chain alkyldiphenylamine and triphenylamine)

L83 ANSWER 30 OF 46 HCAPLUS COPYRIGHT 2005 ACS on STN
1999:428566 Document No. 131:185311 Synthesis and characterization of a high-efficiency light-emitting alternating copolymer. Zheng, Min; Bai, Fenglian; Li, Yuliang; Yu, Gui; Zhu, Daoben (Laboratory of Organic Solids, Institute of Chemistry, The Chinese Academy of Sciences, Beijing, 100080, Peop. Rep. China). Journal of Polymer Science, Part A: Polymer Chemistry, 37(14), 2587-2594 (English) 1999. CODEN: JPACEC. ISSN: 0887-624X. Publisher: John Wiley & Sons, Inc..
IT **240489-90-1P**
RL: DEV (Device component use); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(synthesis and characterization of a high-efficiency light-emitting alternating copolymer)
RN 240489-90-1 HCAPLUS
CN Phosphonic acid, [1,4-phenylenebis(methylene)]bis-, tetramethyl ester, polymer with 4,4'-(phenylimino)bis[benzaldehyde] (9CI) (CA INDEX NAME)

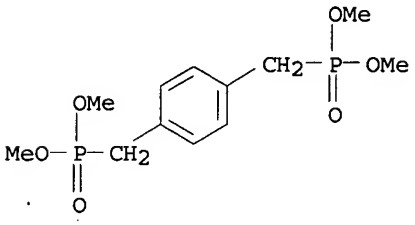
CM 1

CRN 53566-95-3
CMF C20 H15 N O2



CM 2

CRN 52577-04-5
CMF C12 H20 O6 P2

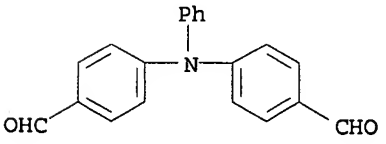


CC 35-5 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 36, 73
IT **240489-90-1P** 240489-91-2P
RL: DEV (Device component use); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(synthesis and characterization of a high-efficiency light-emitting alternating copolymer)

L83 ANSWER 31 OF 46 HCAPLUS COPYRIGHT 2005 ACS on STN
1999:228178 Document No. 131:45642 Light-emitting diodes based on an alternating copolymer containing triphenylamine and phenylene units. Yu, Gui; Liu, Yunqi; Wu, Xia; Zheng, Min; Bai, Fenglian; Zhu, Daoben; Jin, Linpei; Wang, Mingzhao; Wu, Xiuni (Institute of Chemistry, Chinese Academy of Sciences, Beijing, 100080, Peop. Rep. China). Applied Physics Letters, 74(16), 2295-2297 (English) 1999. CODEN: APPLAB. ISSN: 0003-6951. Publisher: American Institute of Physics.
IT **240489-90-1**
RL: DEV (Device component use); PRP (Properties); USES (Uses)
(light-emitting diodes based on alternating copolymer containing triphenylamine and phenylene units)
RN 240489-90-1 HCAPLUS
CN Phosphonic acid, [1,4-phenylenebis(methylene)]bis-, tetramethyl ester, polymer with 4,4'-(phenylimino)bis[benzaldehyde] (9CI) (CA INDEX NAME)

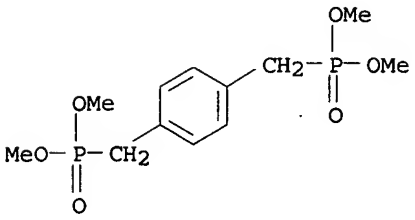
CM 1

CRN 53566-95-3
CMF C20 H15 N O2



CM 2

CRN 52577-04-5
CMF C12 H20 O6 P2

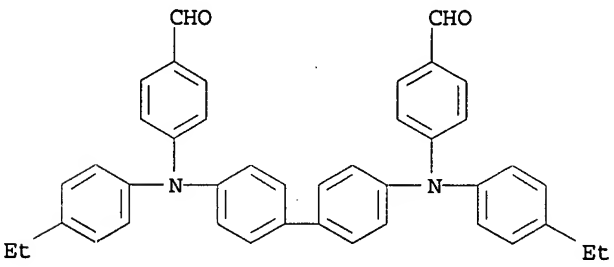


CC 38-3 (Plastics Fabrication and Uses)
Section cross-reference(s): 73
IT 2085-33-8, 8-Hydroxyquinoline aluminum 7429-90-5, Aluminum, uses 50926-11-9, ITO **240489-90-1** 240489-91-2
RL: DEV (Device component use); PRP (Properties); USES (Uses)
(light-emitting diodes based on alternating copolymer containing triphenylamine and phenylene units)

L83 ANSWER 32 OF 46 HCAPLUS COPYRIGHT 2005 ACS on STN
1999:175607 Document No. 130:210117 Charge transport polymers for electroluminescent polymer compositions and processes thereof. Hsieh, Bing R. (Xerox Corporation, USA). U.S. US 5879821 A 19990309, 33 pp. (English). CODEN: USXXAM. APPLICATION: US 1997-969727 19971113.
IT **220995-51-7P**
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(charge transport polymers for electroluminescent polymer compns. and processes thereof)
RN 220995-51-7 HCAPLUS
CN Phosphonium, [1,4-phenylenebis(methylene)]bis[triphenyl-, dibromide, polymer with 4,4'-[[1,1'-biphenyl]-4,4'-diylbis[(4-ethylphenyl)imino]]bis[benzaldehyde] (9CI) (CA INDEX NAME)

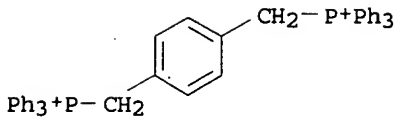
CM 1

CRN 165670-18-8
CMF C42 H36 N2 O2



CM 2

CRN 40817-03-6
CMF C44 H38 P2 . 2 Br



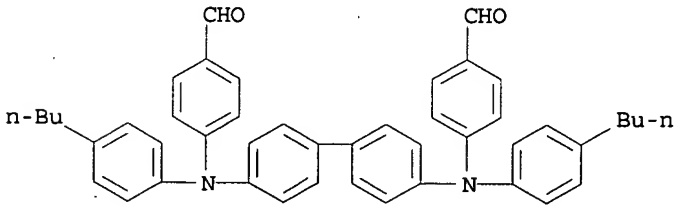
●2 Br^-

IC ICM B32B015-04
ICS B32B007-00
INCL 428690000
CC 35-5 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 73
IT 220995-50-6P **220995-51-7P** 220995-52-8P 220995-53-9P
220995-54-0P 220995-55-1P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(charge transport polymers for electroluminescent polymer compns. and processes thereof)

L83 ANSWER 33 OF 46 HCAPLUS COPYRIGHT 2005 ACS on STN
1999:140103 Document No. 130:267836 Synthesis and characterization of a novel and highly efficient light-emitting polymer. Liu, Y.; Liu, M. S.; Jen, A. K.-Y. (Dep. Chem., Northeastern Univ., Boston, MA, 02115, USA). Acta Polymerica, 50(2-3), 105-108 (English) 1999.
CODEN: ACPODY. ISSN: 0323-7648. Publisher: Wiley-VCH Verlag GmbH.
IT **222310-65-8P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and characterization of highly efficient light-emitting polyamines)
RN 222310-65-8 HCAPLUS
CN Phosphonic acid, [1,4-phenylenebis(methylene)]bis-, tetraethyl ester, polymer with 4,4'-[[1,1'-biphenyl]-4,4'-diylbis[(4-butylphenyl)imino]]bis[benzaldehyde] (9CI) (CA INDEX NAME)

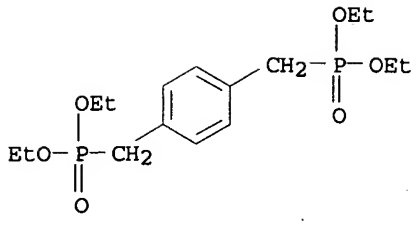
CM 1

CRN 216168-75-1
CMF C46 H44 N2 O2



CM 2

CRN 4546-04-7
CMF C16 H28 O6 P2

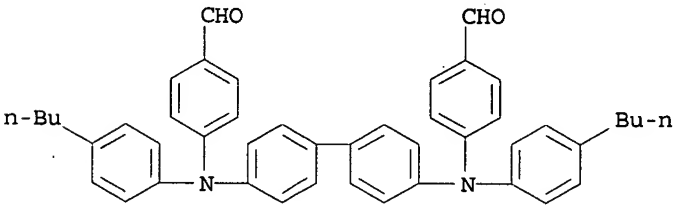


CC 35-5 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 36, 73
IT **222310-65-8P** 222310-67-0P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and characterization of highly efficient light-emitting polyamines)

L83 ANSWER 34 OF 46 HCAPLUS COPYRIGHT 2005 ACS on STN
1998:678101 Document No. 130:25408 Synthesis and Characterization of a Novel Light-Emitting Polymer Containing Highly Efficient Hole-Transporting Aromatic Diamine. Liu, Yunqi; Liu, Michelle S.; Li, Xiao-chang; Jen, Alex K-Y. (Department of Chemistry, Northeastern University, Boston, MA, 02115, USA). Chemistry of Materials, 10(11), 3301-3304 (English) 1998. CODEN: CMATEX. ISSN: 0897-4756. Publisher: American Chemical Society.
IT **216168-76-2P**
RL: DEV (Device component use); PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(preparation and characterization of tetraphenyldiaminobiphenyl-containing electroluminescent poly(phenylenevinylene))
RN 216168-76-2 HCAPLUS
CN Phosphonic acid, [[2-[(2-ethylhexyl)oxy]-5-methoxy-1,4-phenylene]bis(methylene)]bis-, tetraethyl ester, polymer with 4,4'-[[1,1'-biphenyl]-4,4'-diylbis[(4-butylphenyl)imino]]bis[benzaldehyde] (9CI) (CA INDEX NAME)

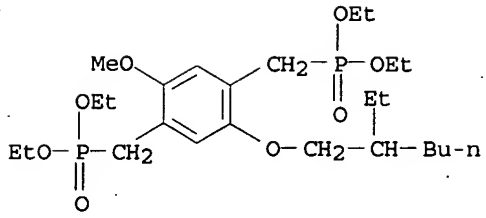
CM 1

CRN 216168-75-1
CMF C46 H44 N2 O2



CM 2

CRN 181307-48-2
CMF C25 H46 O8 P2

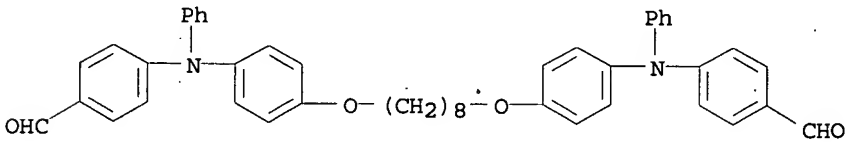


CC 35-5 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 73
IT **216168-76-2P** 216302-21-5P
RL: DEV (Device component use); PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(preparation and characterization of tetraphenyldiaminobiphenyl-containing electroluminescent poly(phenylenevinylene))

L83 ANSWER 35 OF 46 HCAPLUS COPYRIGHT 2005 ACS on STN
1998:586372 Document No. 129:223235 Polyether resin and electrophotographic photoreceptor using it as charge-transporting agent. Atachi, Chihaya; Sasaki, Masaomi (Ricoh Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 10237149 A2 19980908 Heisei, 10 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1997-58594 19970227.
IT **212395-41-0P**
RL: DEV (Device component use); PNU (Preparation, unclassified); PREP (Preparation); USES (Uses)
(electrophotog. photoreceptor using polyether resin as charge-transporting agent)
RN 212395-41-0 HCAPLUS
CN Phosphonic acid, [1,4-phenylenebis(phenylmethylene)]bis-, tetraethyl ester, polymer with 4,4'-[1,8-octanediylbis[oxy-4,1-phenylene(phenylimino)]]bis[benzaldehyde] (9CI) (CA INDEX NAME)

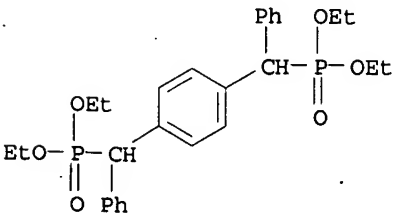
CM 1

CRN 164728-26-1
CMF C46 H44 N2 O4



CM 2

CRN 138615-13-1
CMF C28 H36 O6 P2

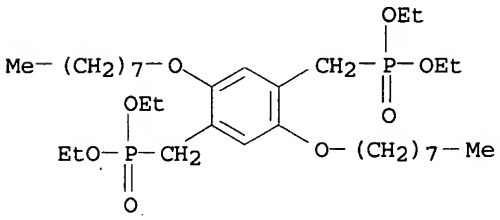


IC ICM C08G016-00
ICS G03G005-05; G03G005-07
CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
IT 186183-91-5P **212395-41-0P**
RL: DEV (Device component use); PNU (Preparation, unclassified); PREP (Preparation); USES (Uses)
(electrophotog. photoreceptor using polyether resin as charge-transporting agent)

L83 ANSWER 36 OF 46 HCAPLUS COPYRIGHT 2005 ACS on STN
1998:321284 Document No. 129:16522 Ordered poly(arylenevinylene) terpolymers, their manufacture and use as electroluminescent materials. Kreuder, Willi; Hoerhold, Hans-Heinrich; Rost, Henning; Hartmann, Annett (Hoechst A.-G., Germany). Ger. Offen. DE 19646877 A1 19980514, 18 pp. (German). CODEN: GWXXBX. APPLICATION: DE 1996-19646877 19961113.
IT **207733-50-4P 207733-62-8P 207733-66-2P 207733-70-8P**
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(ordered poly(arylenevinylene) terpolymers as electroluminescent materials)
RN 207733-50-4 HCAPLUS
CN Phosphonic acid, [[2,5-bis(octyloxy)-1,4-phenylene]bis(methylene)]bis-, tetraethyl ester, polymer with 1,4-benzenedicarboxaldehyde and 4,4'-(phenylimino)bis[benzaldehyde] (9CI) (CA INDEX NAME)

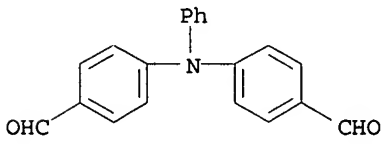
CM 1

CRN 176856-31-8
CMF C32 H60 O8 P2



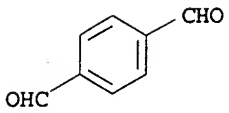
CM 2

CRN 53566-95-3
CMF C20 H15 N O2



CM 3

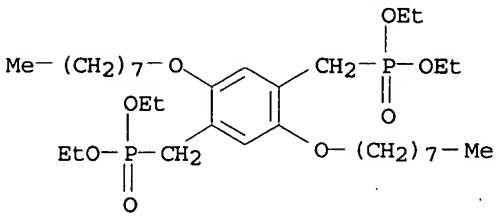
CRN 623-27-8
CMF C8 H6 O2



RN 207733-62-8 HCAPLUS
CN Phosphonic acid, [[2,5-bis(octyloxy)-1,4-phenylene]bis(methylene)]bis-, tetraethyl ester, polymer with 2,5-dimethoxy-1,4-benzenedicarboxaldehyde and 4,4'-(phenylimino)bis[benzaldehyde] (9CI) (CA INDEX NAME)

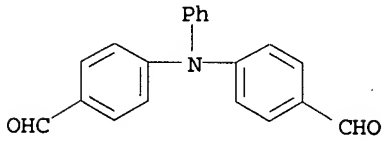
CM 1

CRN 176856-31-8
CMF C32 H60 O8 P2



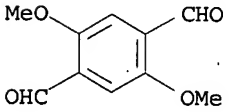
CM 2

CRN 53566-95-3
CMF C20 H15 N O2



CM 3

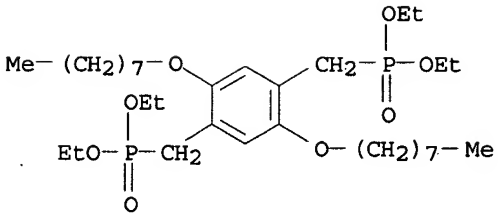
CRN 7310-97-6
CMF C10 H10 O4



RN 207733-66-2 HCAPLUS
CN Phosphonic acid, [[2,5-bis(octyloxy)-1,4-phenylene]bis(methylene)]bis-, tetraethyl ester, polymer with 1,3-benzenedicarboxaldehyde and 4,4'-(phenylimino)bis[benzaldehyde] (9CI) (CA INDEX NAME)

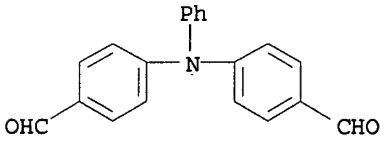
CM 1

CRN 176856-31-8
CMF C32 H60 O8 P2



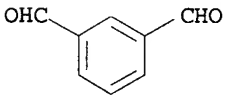
CM 2

CRN 53566-95-3
CMF C20 H15 N O2



CM 3

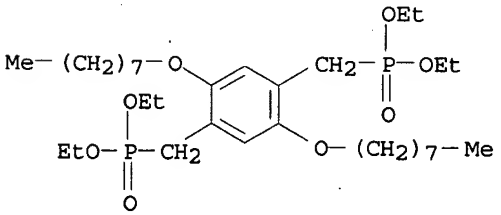
CRN 626-19-7
CMF C8 H6 O2



RN 207733-70-8 HCAPLUS
CN Phosphonic acid, [[2,5-bis(octyloxy)-1,4-phenylene]bis(methylene)]bis-, tetraethyl ester, polymer with 4,4'-carbonylbis[benzaldehyde] and 4,4'-(phenylimino)bis[benzaldehyde] (9CI) (CA INDEX NAME)

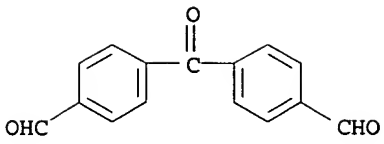
CM 1

CRN 176856-31-8
CMF C32 H60 O8 P2



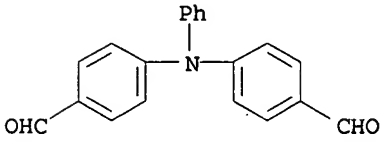
CM 2

CRN 162896-87-9
CMF C15 H10 O3



CM 3

CRN 53566-95-3
CMF C20 H15 N O2

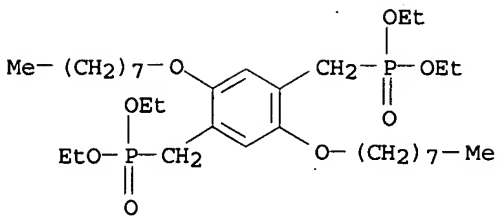


IC ICM C08G061-00
ICS C09K011-06; H05B033-14; C07C015-50; C07C015-52; C07C001-32; C07C047-575; C07C045-45
ICA C08G061-02; C08G061-12; C07C323-22; C07D333-06; C07D339-08
CC 35-5 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 38, 73
IT 207733-43-5P 207733-46-8P **207733-50-4P** 207733-53-7P
207733-56-0P 207733-60-6P **207733-62-8P** 207733-64-0P
207733-66-2P 207733-68-4P **207733-70-8P**
207733-72-0P 207733-78-6P 207733-80-0P 207733-85-5P
207733-86-6P
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(ordered poly(arylenevinylene) terpolymers as electroluminescent materials)

L83 ANSWER 37 OF 46 HCAPLUS COPYRIGHT 2005 ACS on STN
1998:90649 Document No. 128:186034 Synthesis and electroluminescence of novel DSB-segmented copolymers of the PAV/PPV type. Horhold, Hans-Henrich; Rost, Henning; Teuschel, Annett; Kreuder, Willi; Spreitzer, Hubert (Institute Organic Chemistry Macromolecular Chemistry, University Jena, Jena, 07743, Germany). Proceedings of SPIE-The International Society for Optical Engineering, 3148(Organic Light-Emitting Materials and Devices), 139-150 (English) 1997. CODEN: PSISDG. ISSN: 0277-786X. Publisher: SPIE-The International Society for Optical Engineering.
IT **189075-38-5**
RL: DEV (Device component use); USES (Uses)
(synthesis and electroluminescence of novel DSB-segmented copolymers of PAV/PPV type)
RN 189075-38-5 HCAPLUS
CN Phosphonic acid, [[2,5-bis(octyloxy)-1,4-phenylene]bis(methylene)]bis-, tetraethyl ester, polymer with [(phenylimino)di-4,1-phenylene]bis[phenylmethanone] (9CI) (CA INDEX NAME)

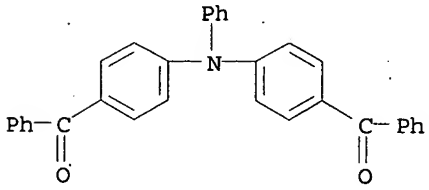
CM 1

CRN 176856-31-8
CMF C32 H60 O8 P2



CM 2

CRN 16911-34-5
CMF C32 H23 N O2

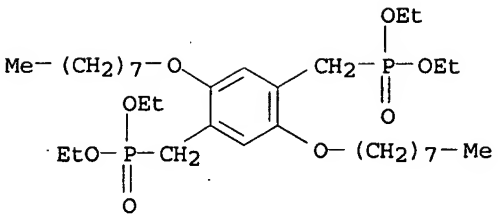


CC 73-5 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
IT 188744-21-0 188982-22-1 188982-23-2**189075-38-5**
203448-66-2 203448-67-3 203448-68-4
RL: DEV (Device component use); USES (Uses)
(synthesis and electroluminescence of novel DSB-segmented copolymers of PAV/PPV type)

L83 ANSWER 38 OF 46 HCAPLUS COPYRIGHT 2005 ACS on STN
1997:317758 Document No. 126:299531 Polymers containing triarylamine units for use as electroluminescent materials. Kreuder, Willi; Hoerhold, Hans-Heinrich; Rost, Henning (Hoechst A.-G., Germany). PCT Int. Appl. WO 9709394 A1 19970313, 54 pp. DESIGNATED STATES: W: CN, JP, KR; RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE. (German). CODEN: PIXXD2. APPLICATION: WO 1996-EP3852 19960903. PRIORITY: DE 1995-19532574 19950904; DE 1995-19535938 19950927.
IT **189075-38-5 189075-44-3**
RL: RCT (Reactant); RACT (Reactant or reagent)
(polymers containing triarylamine units for use as electroluminescent materials and their preparation and devices using them)
RN 189075-38-5 HCAPLUS
CN Phosphonic acid, [[2,5-bis(octyloxy)-1,4-phenylene]bis(methylene)]bis-, tetraethyl ester, polymer with [(phenylimino)di-4,1-phenylene]bis[phenylmethanone] (9CI) (CA INDEX NAME)

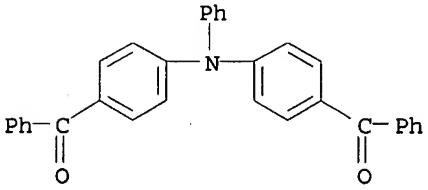
CM 1

CRN 176856-31-8
CMF C32 H60 O8 P2



CM 2

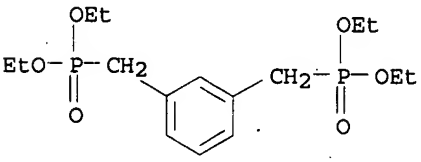
CRN 16911-34-5
CMF C32 H23 N O2



RN 189075-44-3 HCAPLUS
CN Phosphonic acid, [1,3-phenylenebis(methylene)]bis-, tetraethyl ester, polymer with 4,4'-(phenylimino)bis[benzaldehyde] (9CI) (CA INDEX NAME)

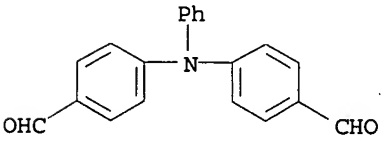
CM 1

CRN 56875-38-8
CMF C16 H28 O6 P2



CM 2

CRN 53566-95-3
CMF C20 H15 N O2



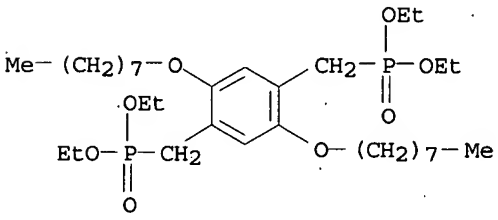
IC ICM C09K011-06
ICS H05B033-14
CC 73-5 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
IT 68-12-2, reactions 122-52-1, Triethylphosphite 437-25-2 603-34-9, Triphenylamine 10025-87-3, Phosphorylchloride

16911-34-5 30525-89-4, Paraformaldehyde 60491-94-3 67399-94-4
189075-38-5 189075-44-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(polymers containing triarylamine units for use as electroluminescent materials and their preparation and devices using them)

L83 ANSWER 39 OF 46 HCAPLUS COPYRIGHT 2005 ACS on STN
1997:280961 Document No. 126:264491 Polymers containing triarylamine units as electroluminescent materials. Kreuder, Willi; Hoerhold, Hans-Heinrich; Rost, Henning (Hoechst A.-G., Germany). Ger. Offen. DE 19532574 A1 19970306, 20 pp. (German). CODEN: GWXXBX.
APPLICATION: DE 1995-19532574 19950904.
IT **188744-19-6P**
RL: IMF (Industrial manufacture); PRP (Properties); PREP (Preparation)
(polymers containing triarylamine units as electroluminescent materials)
RN 188744-19-6 HCAPLUS
CN Phosphonic acid, [[2,5-bis(octyloxy)-1,4-phenylene]bis(methylene)]bis-, tetraethyl ester, polymer with 4,4'-(phenylimino)bis[benzaldehyde] (9CI) (CA INDEX NAME)

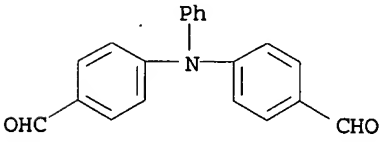
CM 1

CRN 176856-31-8
CMF C32 H60 O8 P2



CM 2

CRN 53566-95-3
CMF C20 H15 N O2



IC ICM C08G016-00
ICS C08G061-12; C09K011-06; C07C223-06; C07C221-00; C07C043-225; C07C041-30; C07C225-22; C07C217-80; C07C213-08; C07F009-40; C07D521-00
ICA C07D247-02; C07D227-02; C07D401-12; C07D403-14; G09F009-33
CC 35-5 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 25, 76
IT 16911-34-5P **188744-19-6P** 188744-21-0P 188744-26-5P 188744-28-7P 188744-31-2P
RL: IMF (Industrial manufacture); PRP (Properties); PREP (Preparation)
(polymers containing triarylamine units as electroluminescent materials)

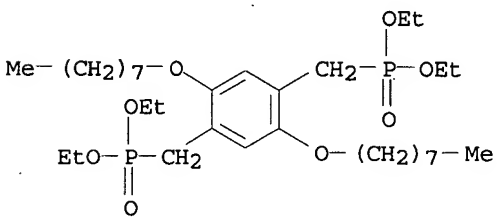
L83 ANSWER 40 OF 46 HCAPLUS COPYRIGHT 2005 ACS on STN
1997:217311 Document No. 126:278150 Novel light emitting and photoconducting polyarylenevinylene derivatives containing phenylene arylamine and phenylene oxide units in the main chain. Rost, H.; Teuschel, A.; Pfeiffer, S.; Hoerhold, H.-H. (University of Jena, Institute of Organic Chemistry and Macromolecular Chemistry, Humboldtstr. 10, Jena, 07743, Germany). Synthetic Metals, 84(1-3), 269-270 (English) 1997. CODEN: SYMEDZ. ISSN: 0379-6779. Publisher: Elsevier.

IT **188744-19-6P 188982-24-3P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and properties of novel light emitting and photoconducting polyarylenevinylene derivs. containing phenylene arylamine and phenylene oxide units in main chain)

RN 188744-19-6 HCAPLUS
CN Phosphonic acid, [[2,5-bis(octyloxy)-1,4-phenylene]bis(methylene)]bis-, tetraethyl ester, polymer with 4,4'-(phenylimino)bis[benzaldehyde] (9CI) (CA INDEX NAME)

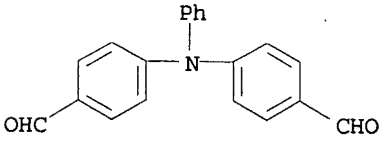
CM 1

CRN 176856-31-8
CMF C32 H60 O8 P2



CM 2

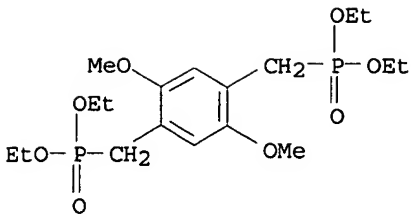
CRN 53566-95-3
CMF C20 H15 N O2



RN 188982-24-3 HCAPLUS
CN Phosphonic acid, [(2,5-dimethoxy-1,4-phenylene)bis(methylene)]bis-, tetraethyl ester, polymer with [(phenylimino)di-4,1-phenylene]bis[phenylmethanone] (9CI) (CA INDEX NAME)

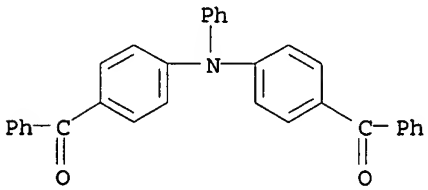
CM 1

CRN 60491-94-3
CMF C18 H32 O8 P2



CM 2

CRN 16911-34-5
CMF C32 H23 N O2

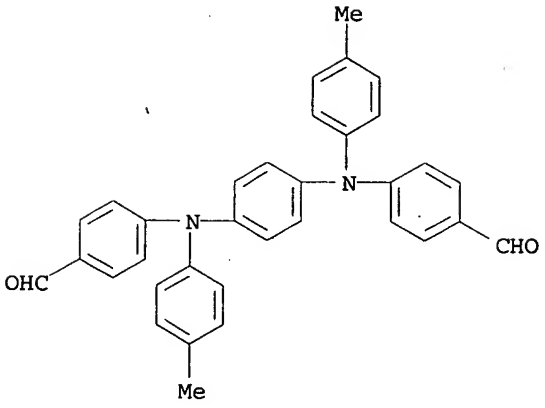


CC 37-5 (Plastics Manufacture and Processing)
IT 178985-14-3P **188744-19-6P** 188744-21-0P 188982-22-1P
188982-23-2P **188982-24-3P** 188982-25-4P 188982-26-5P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and properties of novel light emitting and photoconducting polyarylenevinylene derivs. containing phenylene arylamine and phenylene oxide units in main chain)

L83 ANSWER 41 OF 46 HCAPLUS COPYRIGHT 2005 ACS on STN
1996:560311 Document No. 125:196755 Polymeric carrier-transporting materials for electroluminescent devices, electrophotographic photoreceptors, etc.. Ito, Juichi; Sato, Hisaya; Hayashi, Takako (Toppan Printing Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 08157575 A2 19960618 Heisei, 20 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1994-330622 19941207.
IT **181064-89-1P 181064-91-5P**
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polymeric carrier-transporting materials for electroluminescent devices and electrophotog. photoreceptors)
RN 181064-89-1 HCAPLUS
CN Phosphonium, [1,3-phenylenebis(methylene)]bis[triphenyl-, dichloride, polymer with 4,4'-[1,4-phenylenebis[(4-methylphenyl)imino]]bis[benzaldehyde] (9CI) (CA INDEX NAME)

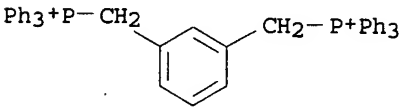
CM 1

CRN 131660-39-4
CMF C34 H28 N2 O2



CM 2

CRN 66726-75-8
CMF C44 H38 P2 . 2 Cl

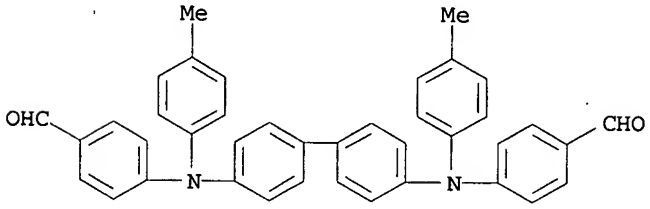


●2 Cl-

RN 181064-91-5 HCAPLUS
CN Phosphonium, [1,3-phenylenebis(methylene)]bis[triphenyl-, dichloride, polymer with 4,4'-[[1,1'-biphenyl]-4,4'-diylbis[(4-methylphenyl)imino]]bis[benzaldehyde] (9CI) (CA INDEX NAME)

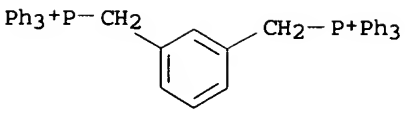
CM 1

CRN 181064-88-0
CMF C40 H32 N2 O2



CM 2

CRN 66726-75-8
CMF C44 H38 P2 . 2 Cl



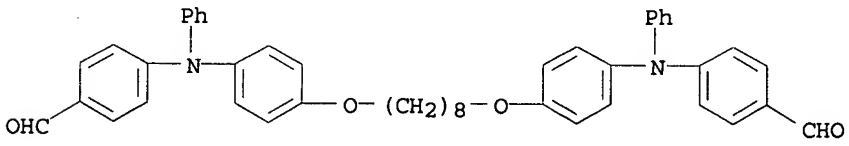
●2 Cl⁻

IC ICM C08G061-12
ICS C07C223-06; C07C229-44; C07C317-32; C07D333-76; C09K011-06
CC 35-5 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 74, 76
IT **181064-89-1P** 181064-90-4P **181064-91-5P**
181064-92-6P
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polymeric carrier-transporting materials for electroluminescent devices and electrophotog. photoreceptors)

L83 ANSWER 42 OF 46 HCAPLUS COPYRIGHT 2005 ACS on STN
1996:317176 Document No. 125:70553 Synthesis of polymer with bisstyrylanthracene chromophore on polymer skeleton and application to electroluminescent devices. Kim, Dong Uk; Tsutsui, Tetsuo (Dep. of Materials Science and Technology, Kyushu Univ., Kasuga, 816, Japan). Molecular Crystals and Liquid Crystals Science and Technology, Section A: Molecular Crystals and Liquid Crystals, 280, 325-329 (English) 1996. CODEN: MCLCE9. ISSN: 1058-725X.
Publisher: Gordon & Breach.
IT **178483-31-3P**
RL: DEV (Device component use); PEP (Physical, engineering or chemical process); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); PROC (Process); USES (Uses)
(synthesis and electroluminescent device applications of polymer incorporating anthracene chromophore)
RN 178483-31-3 HCAPLUS
CN Phosphonic acid, [9,10-anthracenediylbis(methylene)]bis-, tetraethyl ester, polymer with 4,4'-[1,8-octanediylbis[oxy-4,1-phenylene(phenylimino)]]bis[benzaldehyde] (9CI) (CA INDEX NAME)

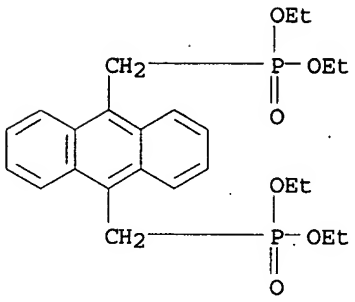
CM 1

CRN 164728-26-1
CMF C46 H44 N2 O4



CM 2

CRN 60974-92-7
CMF C24 H32 O6 P2

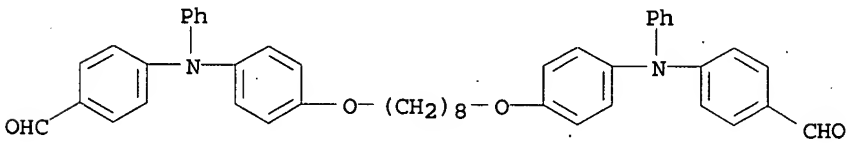


CC 73-5 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
Section cross-reference(s): 35, 36, 76
IT 178483-30-2P **178483-31-3P**
RL: DEV (Device component use); PEP (Physical, engineering or chemical process); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); PROC (Process); USES (Uses)
(synthesis and electroluminescent device applications of polymer incorporating anthracene chromophore)

L83 ANSWER 43 OF 46 HCAPLUS COPYRIGHT 2005 ACS on STN
1996:317175 Document No. 125:98641 Material design of polymers with chromophores in skeletons for electroluminescent devices. Tsutsui, Tetsuo; Kim, Dong Uk (Dep. of Materials Science and Technology, Kyushu Univ., Fukuoka, 816, Japan). Molecular Crystals and Liquid Crystals Science and Technology, Section A: Molecular Crystals and Liquid Crystals, 280, 319-324 (English) 1996. CODEN: MCLCE9. ISSN: 1058-725X. Publisher: Gordon & Breach.
IT **178483-31-3**
RL: DEV (Device component use); USES (Uses)
(electroluminescent polymer; material design of polymers with anthracene chromophores in skeletons for electroluminescent devices)
RN 178483-31-3 HCAPLUS
CN Phosphonic acid, [9,10-anthracenediylbis(methylene)]bis-, tetraethyl ester, polymer with 4,4'-[1,8-octanediylbis[oxy-4,1-phenylene(phenylimino)]]bis[benzaldehyde] (9CI) (CA INDEX NAME)

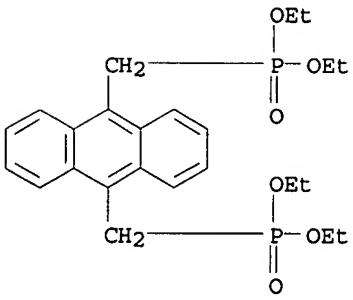
CM 1

CRN 164728-26-1
CMF C46 H44 N2 O4



CM 2

CRN 60974-92-7
CMF C24 H32 O6 P2

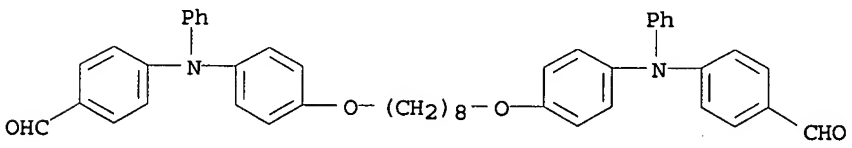


CC 73-5 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
Section cross-reference(s): 36, 76
IT 178483-30-2 **178483-31-3**
RL: DEV (Device component use); USES (Uses)
(electroluminescent polymer; material design of polymers with anthracene chromophores in skeletons for electroluminescent devices)

L83 ANSWER 44 OF 46 HCAPLUS COPYRIGHT 2005 ACS on STN
1995:957521 Document No. 124:10417 Comparison of device performance in two thin-film electroluminescent devices made of vacuum-sublimed dye film and spin-coated polymer film. Kim, Dong Uk; Aminaka, Ei-ichiro; Tsutsui, Tetsuo; Saito, Shogo (Dep. of Materials Science and Technology, Kyushu Univ., Fukuoka, 816, Japan). Japanese Journal of Applied Physics, Part 1: Regular Papers, Short Notes & Review Papers, 34(11), 6255-9 (English) 1995. CODEN: JAPNDE. ISSN: 0021-4922. Publisher: Japanese Journal of Applied Physics.
IT **171422-55-2**
RL: DEV (Device component use); PRP (Properties); USES (Uses)
(comparison of device performance in two thin-film electroluminescent devices made of vacuum-sublimed dye film and spin-coated polymer film)
RN 171422-55-2 HCAPLUS
CN Phosphonium, [1,4-phenylenebis(methylene)]bis[triphenyl-, dibromide, polymer with 4,4'-[1,8-octanediylbis[oxy-4,1-phenylene(phenylimino)]]bis[benzaldehyde] (9CI) (CA INDEX NAME)

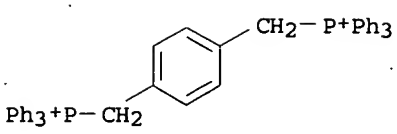
CM 1

CRN 164728-26-1
CMF C46 H44 N2 O4



CM 2

CRN 40817-03-6
CMF C44 H38 P2 . 2 Br



● 2 Br^-

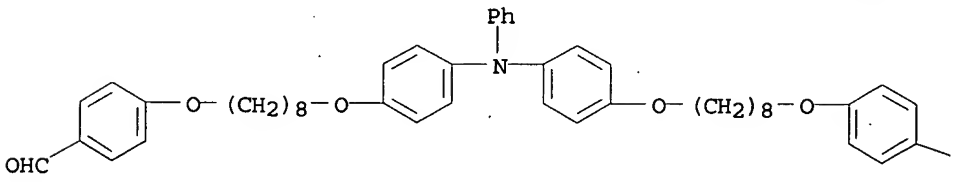
CC 38-3 (Plastics Fabrication and Uses)
Section cross-reference(s): 73
IT 138372-67-5 138685-19-5 **171422-55-2**
RL: DEV (Device component use); PRP (Properties); USES (Uses)
(comparison of device performance in two thin-film electroluminescent devices made of vacuum-sublimed dye film and spin-coated polymer film)

L83 ANSWER 45 OF 46 HCAPLUS COPYRIGHT 2005 ACS on STN
1995:688098 Document No. 123:84910 Synthesis of electroluminescent polymer containing charge transport and emissive chromophores on polymer skeleton. Kim, Dong Uk; Tsutsui, Tetsuo; Saito, Shogo (Dep. Mater. Sci. Technol., Kyushu Univ., Kasuga, 816, Japan). Chemistry Letters (7), 587-8 (English) 1995. CODEN: CMLTAG. ISSN: 0366-7022. Publisher: Nippon Kagakkai.
IT **165550-58-3P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and electroluminescence and charge transport of poly(distyrylbenzene phenylamine))
RN 165550-58-3 HCAPLUS
CN Phosphonium, [1,4-phenylenebis(methylene)]bis[triphenyl-, dibromide, polymer with 4,4'-[(phenylamino)bis(4,1-phenyleneoxy-8,1-octanediyloxy)]bis[benzaldehyde] (9CI) (CA INDEX NAME)

CM 1

CRN 165550-57-2
CMF C48 H55 N O6

PAGE 1-A

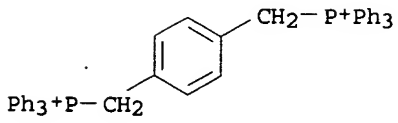


PAGE 1-B

CHO

CM 2

CRN 40817-03-6
CMF C44 H38 P2 . 2 Br



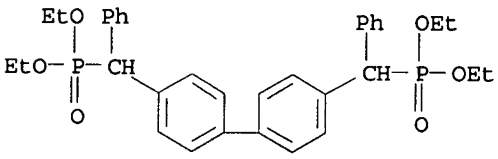
●2 Br^-

CC 37-6 (Plastics Manufacture and Processing)
IT **165550-58-3P** 165550-60-7P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and electroluminescence and charge transport of poly(distyrylbenzene phenylamine))

L83 ANSWER 46 OF 46 HCAPLUS COPYRIGHT 2005 ACS on STN
1993:528521 Document No. 119:128521 Preparation of 2-[4-(2-alkenyloxyphenyl)]-5-alkylpyridines, ferroelectric liquid-crystal compositions containing them, and liquid-crystal display devices. Takehara, Sadao; Oosawa, Masashi; Nakamura, Kayoko (Dainippon Ink & Chemicals, Japan). Jpn. Kokai Tokkyo Koho JP 05025134 A2 19930202 Heisei, 13 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1991-175259 19910716.
IT **149676-02-8 149676-03-9 149676-05-1**
149676-07-3 149676-09-5 149676-11-9
149676-13-1 149676-15-3 149676-17-5
149676-19-7
RL: TEM (Technical or engineered material use); USES (Uses)
(liquid crystal compns. containing, for display devices)
RN 149676-02-8 HCAPLUS
CN Phosphonic acid, [[1,1'-biphenyl]-4,4'-diylbis(phenylmethylene)]bis-, tetraethyl ester, polymer with 4,4'-(phenylimino)bis[benzaldehyde] (9CI) (CA INDEX NAME)

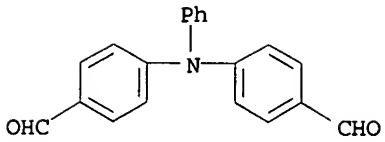
CM 1

CRN 149451-98-9
CMF C34 H40 O6 P2



CM 2

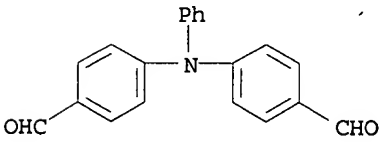
CRN 53566-95-3
CMF C20 H15 N O2



RN 149676-03-9 HCAPLUS
CN Phosphonic acid, [[1,1'-biphenyl]-4,4'-diylbis(methylene)]bis-, tetraethyl ester, polymer with 4,4'-(phenylimino)bis[benzaldehyde] (9CI) (CA INDEX NAME)

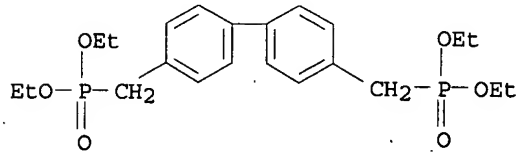
CM 1

CRN 53566-95-3
CMF C20 H15 N O2



CM 2

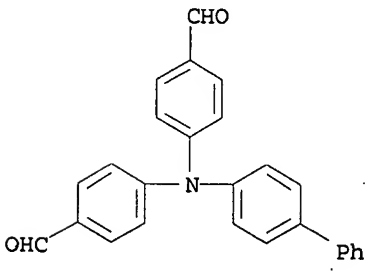
CRN 17919-34-5
CMF C22 H32 O6 P2



RN 149676-05-1 HCAPLUS
CN Phosphonic acid, [[1,1'-biphenyl]-4,4'-diylbis(phenylmethylene)]bis-, tetraethyl ester, polymer with 4,4'-([1,1'-biphenyl]-4-ylimino)bis[benzaldehyde] (9CI) (CA INDEX NAME)

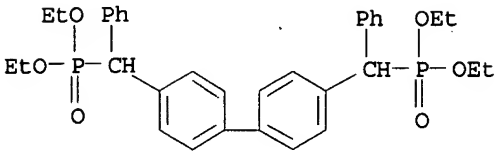
CM 1

CRN 149676-04-0
CMF C26 H19 N O2



CM 2

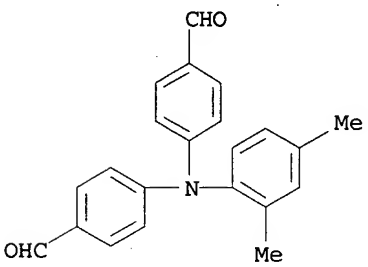
CRN 149451-98-9
CMF C34 H40 O6 P2



RN 149676-07-3 HCAPLUS
CN Phosphonic acid, [[1,1'-biphenyl]-4,4'-diylbis(phenylmethylene)]bis-, tetraethyl ester, polymer with 4,4'-[(2,4-dimethylphenyl)imino]bis[benzaldehyde] (9CI) (CA INDEX NAME)

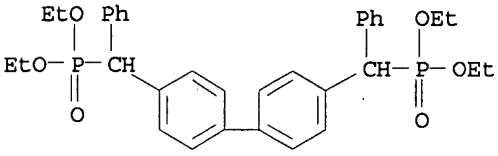
CM 1

CRN 149676-06-2
CMF C22 H19 N O2



CM 2

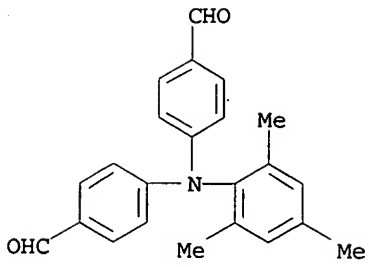
CRN 149451-98-9
CMF C34 H40 O6 P2



RN 149676-09-5 HCAPLUS
CN Phosphonic acid, [[1,1'-biphenyl]-4,4'-diylbis(phenylmethylene)]bis-, tetraethyl ester, polymer with 4,4'-[(2,4,6-trimethylphenyl)imino]bis[benzaldehyde] (9CI) (CA INDEX NAME)

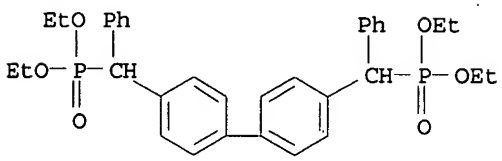
CM 1

CRN 149676-08-4
CMF C23 H21 N O2



CM 2

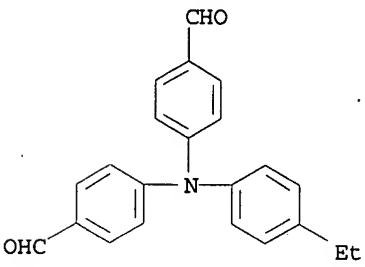
CRN 149451-98-9
CMF C34 H40 O6 P2



RN 149676-11-9 HCAPLUS
CN Phosphonic acid, [[1,1'-biphenyl]-4,4'-diylbis(phenylmethylene)]bis-, tetraethyl ester, polymer with 4,4'-[(4-ethylphenyl)imino]bis[benzaldehyde] (9CI) (CA INDEX NAME)

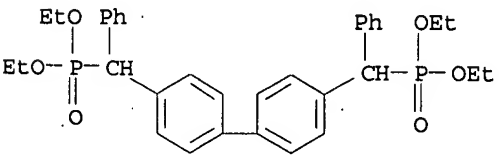
CM 1

CRN 149676-10-8
CMF C22 H19 N O2



CM 2

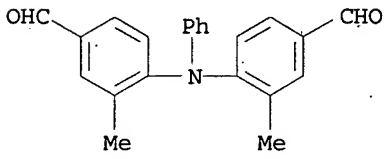
CRN 149451-98-9
CMF C34 H40 O6 P2



RN 149676-13-1 HCAPLUS
CN Phosphonic acid, [[1,1'-biphenyl]-4,4'-diylbis(phenylmethylene)]bis-, tetraethyl ester, polymer with 4,4'-(phenylimino)bis[3-methylbenzaldehyde] (9CI) (CA INDEX NAME)

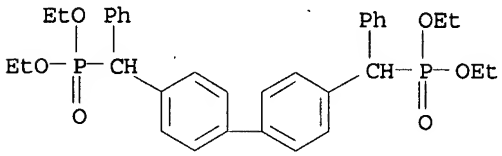
CM 1

CRN 149676-12-0
CMF C22 H19 N O2



CM 2

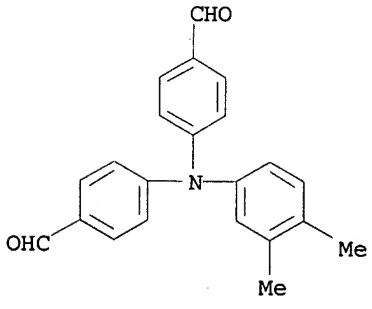
CRN 149451-98-9
CMF C34 H40 O6 P2



RN 149676-15-3 HCAPLUS
CN Phosphonic acid, [[1,1'-biphenyl]-4,4'-diylbis(phenylmethylene)]bis-, tetraethyl ester, polymer with 4,4'-[(3,4-dimethylphenyl)imino]bis[benzaldehyde] (9CI) (CA INDEX NAME)

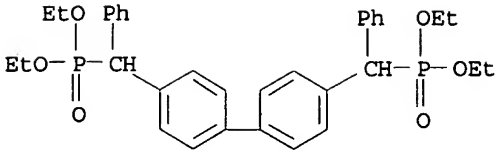
CM 1

CRN 149676-14-2
CMF C22 H19 N O2



CM 2

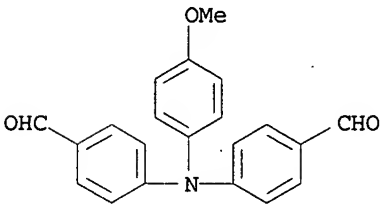
CRN 149451-98-9
CMF C34 H40 O6 P2



RN 149676-17-5 HCAPLUS
CN Phosphonic acid, [[1,1'-biphenyl]-4,4'-diylbis(phenylmethylene)]bis-, tetraethyl ester, polymer with 4,4'-[(4-methoxyphenyl)imino]bis[benzaldehyde] (9CI) (CA INDEX NAME)

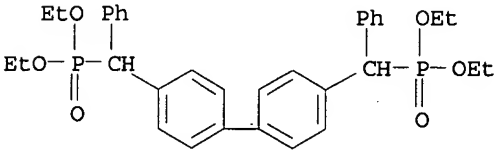
CM 1

CRN 149676-16-4
CMF C21 H17 N O3



CM 2

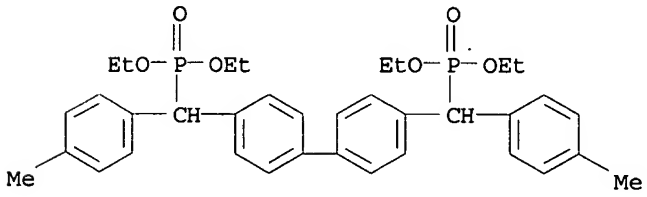
CRN 149451-98-9
CMF C34 H40 O6 P2



RN 149676-19-7 HCAPLUS
CN Phosphonic acid, [[1,1'-biphenyl]-4,4'-diylbis[(4-methylphenyl)methylene]]bis-, tetraethyl ester, polymer with 4,4'-[(2,4-dimethylphenyl)imino]bis[benzaldehyde] (9CI) (CA INDEX NAME)

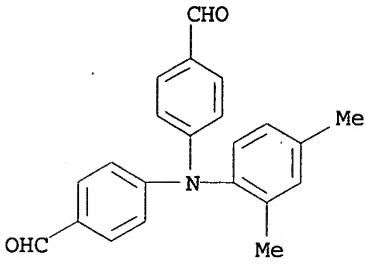
CM 1

CRN 149676-18-6
CMF C36 H44 O6 P2



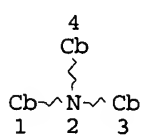
CM 2

CRN 149676-06-2
CMF C22 H19 N O2



IC ICM C07D213-30
ICS C07D239-26; C09K019-34; C09K019-42; C09K019-58
CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 75
IT **149676-02-8 149676-03-9 149676-05-1 149676-07-3 149676-09-5 149676-11-9 149676-13-1 149676-15-3 149676-17-5 149676-19-7**
RL: TEM (Technical or engineered material use); USES (Uses)
(liquid crystal compns. containing, for display devices)

=> => d que stat l84
L6 SCR 2043
L9 STR



NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
GGCAT IS UNS AT 1
GGCAT IS UNS AT 3
GGCAT IS UNS AT 4
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 4

STEREO ATTRIBUTES: NONE
L13 4788 SEA FILE=REGISTRY SSS FUL L6 AND L9
L24 STR

P 2 P 1

NODE ATTRIBUTES:
CONNECT IS M1 RC AT 1
CONNECT IS M1 RC AT 2
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 2

STEREO ATTRIBUTES: NONE
L32 STR

C=CH~Cy~CH=C
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NODE ATTRIBUTES:
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GGCAT IS UNS AT 3
DEFAULT ECLEVEL IS LIMITED
ECOUNT IS M4-X14 C M0-X1 S AT 3

GRAPH ATTRIBUTES:
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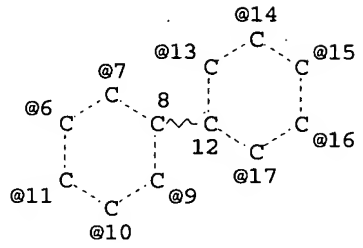
STEREO ATTRIBUTES: NONE
L33 STR

C=CH CH=C
1 @2 @4 5



VPA 2-7/6/11/10/9 U
VPA 4-13/14/15/16/17 U
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 16

STEREO ATTRIBUTES: NONE
L37 418 SEA FILE=REGISTRY SUB=L13 SSS FUL (L24 OR L32 OR L33)
L39 224 SEA FILE=HCAPLUS ABB=ON PLU=ON L37
L42 112 SEA FILE=REGISTRY SUB=L13 SSS FUL L24
L46 25 SEA FILE=REGISTRY SUB=L13 SSS FUL L33
L47 1 SEA FILE=REGISTRY ABB=ON PLU=ON L42 AND 1/NC
L50 24 SEA FILE=HCAPLUS ABB=ON PLU=ON L46
L51 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L47
L56 111 SEA FILE=REGISTRY ABB=ON PLU=ON L42 NOT L47
L64 11501 SEA FILE=HCAPLUS ABB=ON PLU=ON ORG?(3A)(FILM OR THINFILM?)(3A)TRANSISTOR? OR TFT
L65 3 SEA FILE=HCAPLUS ABB=ON PLU=ON L39 AND L64
L66 73 SEA FILE=HCAPLUS ABB=ON PLU=ON L56
L67 26 SEA FILE=HCAPLUS ABB=ON PLU=ON L50 OR L65
L68 59 SEA FILE=HCAPLUS ABB=ON PLU=ON L66 NOT L67
L69 198 SEA FILE=HCAPLUS ABB=ON PLU=ON L39 NOT L67
L70 197 SEA FILE=HCAPLUS ABB=ON PLU=ON L69 NOT L51
L73 102 SEA FILE=HCAPLUS ABB=ON PLU=ON L70 AND P/DT
L74 95 SEA FILE=HCAPLUS ABB=ON PLU=ON L70 NOT L73
L75 78 SEA FILE=HCAPLUS ABB=ON PLU=ON L74 NOT 2004-2005/PY
L76 87 SEA FILE=HCAPLUS ABB=ON PLU=ON L73 AND 1907-2001/AY,PRY

L77 165 SEA FILE=HCAPLUS ABB=ON PLU=ON L75 OR L76

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L79          12 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L68 AND P/DT
L80          47 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L68 NOT L79
L81          38 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L80 NOT 2004-2005/PY
L82           8 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L79 AND 1907-2001/AY,PRY

L83          46 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L81 OR L82
L84         119 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L77 NOT L83

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hitind
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L84 ANSWER 1 OF 119 HCAPLUS COPYRIGHT 2005 ACS on STN

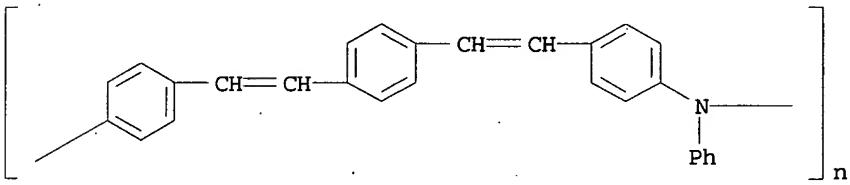
2004:150853 Document No. 141:164011 Preparation of aluminum tetrasulfophthalocyanine chloride doped sol-gel composite and its optical properties. Zhan, Hongbing; Zou, Chunlin; Chen, Wenzhe; Wang, Minquan (Department of Materials Science and Engineering, Zhejiang University, Hangzhou, 310027, Peop. Rep. China). Guangzi Xuebao, 32(11), 1367-1370 (Chinese) 2003. CODEN: GUXUED. ISSN: 1004-4213. Publisher: Kexue Chubanshe.

IT **240489-91-2**

RL: MOA (Modifier or additive use); PRP (Properties); USES (Uses)
(preparation of aluminum tetrasulfophthalocyanine chloride doped sol-gel composite and optical properties)

RN 240489-91-2 HCAPLUS

CN Poly[(phenylimino)-1,4-phenylene-1,2-ethenediyl-1,4-phenylene-1,2-ethenediyl-1,4-phenylene] (9CI) (CA INDEX NAME)



CC 73-4 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)

IT **240489-91-2**

RL: MOA (Modifier or additive use); PRP (Properties); USES (Uses)
(preparation of aluminum tetrasulfophthalocyanine chloride doped sol-gel composite and optical properties)

L84 ANSWER 6 OF 119 HCAPLUS COPYRIGHT 2005 ACS on STN

2003:413434 Document No. 139:157061 Enhanced efficiency of light-emitting polymers through intra-molecular energy transfer. Sun, H. H.; Tu, G. L.; Min, C. C.; Li, H. C.; Cheng, Y. X.; Wang, L. X.; Jing, X. B.; Wang, F. S.; Wu, H. B.; Peng, J. B.; Cao, Y. (State Key Laboratory of Polymer Physics and Chemistry, Changchun Institute of Applied Chemistry, Chinese Academy of Sciences, Changchun, 130022, Peop. Rep. China). Synthetic Metals, 135-136, 231-233 (English) 2003. CODEN: SYMEDZ. ISSN: 0379-6779. Publisher: Elsevier Science B.V..

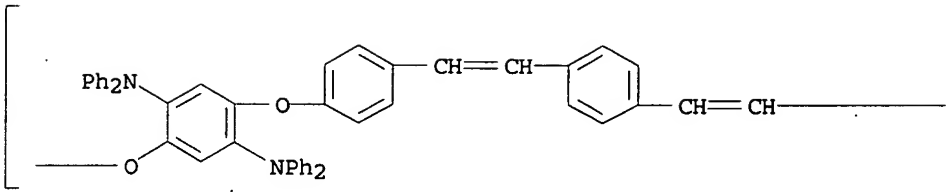
IT **477245-47-9P**

RL: PNU (Preparation, unclassified); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(enhanced efficiency of light-emitting polymers through intra-mol. energy transfer)

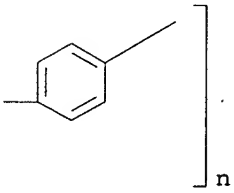
RN 477245-47-9 HCAPLUS

CN Poly[oxy[2,5-bis(diphenylamino)-1,4-phenylene]oxy-1,4-phenylene-1,2-ethenediyl-1,4-phenylene-1,2-ethenediyl-1,4-phenylene] (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



CC 73-11 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
Section cross-reference(s): 36, 76

IT **477245-47-9P** 570411-89-1P 570411-90-4P 570411-91-5P 570411-92-6P 570411-93-7P 570411-94-8P 570411-95-9P
RL: PNU (Preparation, unclassified); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(enhanced efficiency of light-emitting polymers through intra-mol. energy transfer)

L84 ANSWER 11 OF 119 HCAPLUS COPYRIGHT 2005 ACS on STN
2003:126956 Document No. 138:376295 Multicolor organic light-emitting displays by solution processing. Mueller, C. David; Falcou, Aurelie; Reckefuss, Nina; Rojahn, Markus; Wiederhirn, Valerie; Rudati, Paula; Frohne, Holger; Nuyken, Oskar; Becker, Heinrich; Meerholz, Klaus (Department Chemie, Universitaet Muenchen, Munich, 81377, Germany). Nature (London, United Kingdom), 421(6925), 829-833 (English) 2003. CODEN: NATUAS. ISSN: 0028-0836. Publisher: Nature Publishing Group.

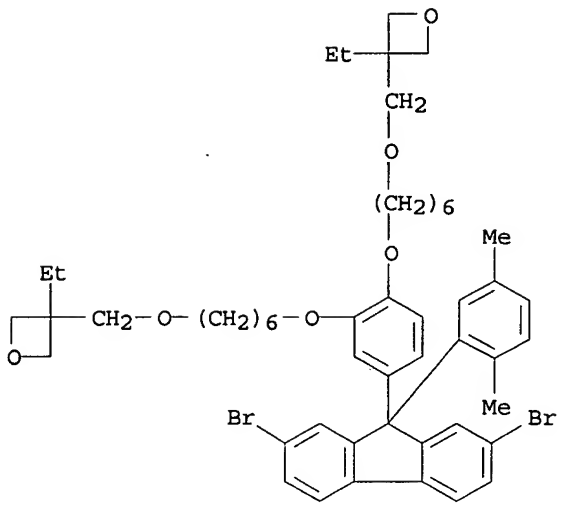
IT **521985-57-9P**
RL: DEV (Device component use); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(photoimaging electroluminescent oxethane-functionalized spirobifluorene-fluorene polymers and fabrication of pixelated matrix displays using this compds.)

RN 521985-57-9 HCAPLUS

CN [1,1'-Biphenyl]-4,4'-diamine, N,N'-bis(4-bromophenyl)-N,N'-bis[4-(1,1-dimethylethyl)phenyl]-, polymer with 1,4-bis[2-(4-bromo-2,5-dimethoxyphenyl)ethenyl]-2-[(2-ethylhexyl)oxy]-5-methoxybenzene, 3,3'-[[4-[2,7-dibromo-9-(2,5-dimethylphenyl)-9H-fluoren-9-yl]-1,2-phenylene]bis(oxy-6,1-hexanediyloxymethylene)]bis[3-ethyloxetane] and 2,2'-[2',3',6',7'-tetrakis(2-methylbutoxy)-9,9'-spirobi[9H-fluorene]-2,7-diyl]bis[1,3,2-dioxaborolane] (9CI) (CA INDEX NAME)

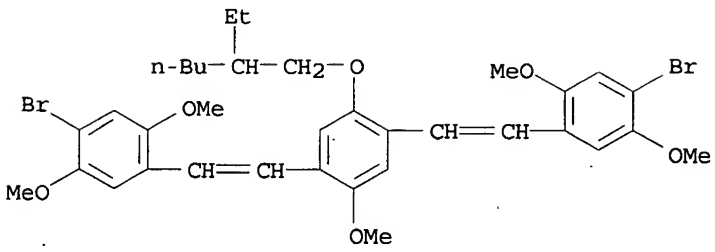
CM 1

CRN 521985-55-7
CMF C51 H64 Br2 O6



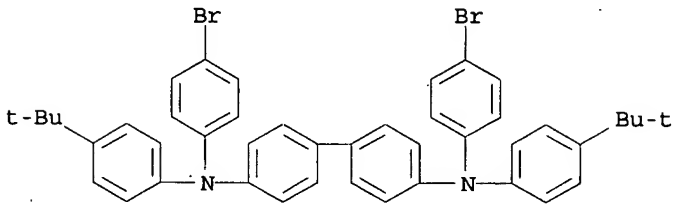
CM 2

CRN 501434-75-9
CMF C35 H42 Br2 O6



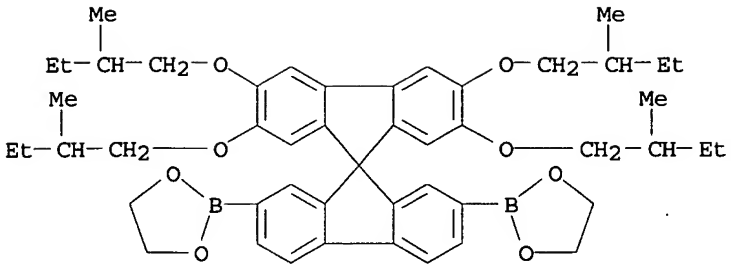
CM 3

CRN 463944-36-7
CMF C44 H42 Br2 N2



CM 4

CRN 396123-43-6
CMF C49 H62 B2 O8



CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT 463944-39-0P 521985-56-8P **521985-57-9P** 521985-58-0P
RL: DEV (Device component use); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(photoimaging electroluminescent oxethane-functionalized spirobifluorene-fluorene polymers and fabrication of pixelated matrix displays using this compds.)

L84 ANSWER 16 OF 119 HCAPLUS COPYRIGHT 2005 ACS on STN

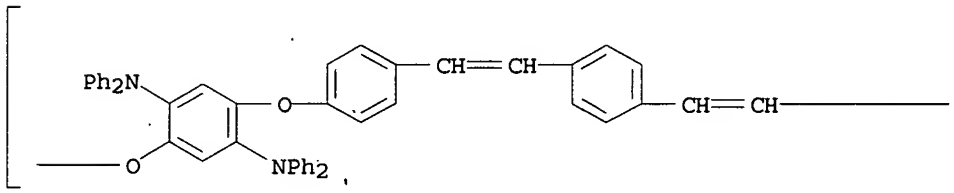
2002:791425 Document No. 138:9359 Novel Thermally Stable Blue-Light-Emitting Polymer Containing N,N,N',N'-Tetraphenyl-Phenylenediamine Units and Its Intramolecular Energy Transfer. Li, Hongchao; Hu, Yufeng; Zhang, Yanguang; Ma, Dongge; Wang, Lixiang; Jing, Xiabin; Wang, Fosong (State Key Laboratory of Polymer Physics and Chemistry, Changchun Institute of Applied Chemistry, Chinese Academy of Sciences, Changchun, 130022, Peop. Rep. China). Chemistry of Materials, 14(11), 4484-4486 (English) 2002. CODEN: CMATEX. ISSN: 0897-4756. Publisher: American Chemical Society.

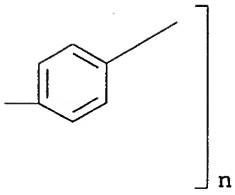
IT **477245-47-9P**
RL: DEV (Device component use); PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); PROC (Process); USES (Uses)
(film and in solution; novel thermally stable blue-light-emitting polymer containing N,N,N',N'-tetra-Ph-phenylenediamine units and its intramol. energy transfer)

RN 477245-47-9 HCAPLUS

CN Poly[oxy[2,5-bis(diphenylamino)-1,4-phenylene]oxy-1,4-phenylene-1,2-ethenediyl-1,4-phenylene-1,2-ethenediyl-1,4-phenylene] (9CI) (CA INDEX NAME)

PAGE 1-A





CC 73-5 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
Section cross-reference(s): 36, 76

IT **477245-47-9P**
RL: DEV (Device component use); PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); PROC (Process); USES (Uses)
(film and in solution; novel thermally stable blue-light-emitting polymer containing N,N,N',N'-tetra-Ph-phenylenediamine units and its intramol. energy transfer)

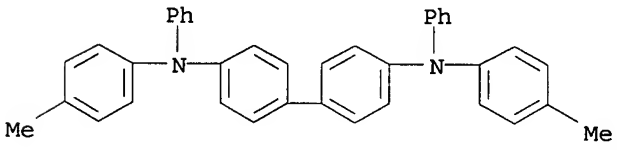
L84 ANSWER 21 OF 119 HCAPLUS COPYRIGHT 2005 ACS on STN
2002:261199 Document No. 137:33645 Preparation of new hole transport polymers via copolymerization of N,N'-diphenyl-N,N'-bis(4-alkylphenyl)benzidine (TPD) derivatives with 1,4-divinylbenzene.
Wang, Xiaoqing; Chen, Zhijian; Ogino, Kenji; Sato, Hisaya; Strzelec, Krzysztof; Miyata, Seizo; Luo, Yunjun; Tan, Huiming (Faculty of Technology, Tokyo University of Agriculture and Technology, Tokyo, 184-8588, Japan). Macromolecular Chemistry and Physics, 203(4), 739-747 (English) 2002. CODEN: MCHPES. ISSN: 1022-1352.
Publisher: Wiley-VCH Verlag GmbH.

IT **437606-02-5P 437606-04-7P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation of new hole transport polymers via copolymn. of N,N'-di-Ph-N,N'-bis(4-alkylphenyl)benzidine (TPD) derivs. with 1,4-divinylbenzene)

RN 437606-02-5 HCAPLUS
CN [1,1'-Biphenyl]-4,4'-diamine, N,N'-bis(4-methylphenyl)-N,N'-diphenyl-, polymer with 1,4-diethenylbenzene (9CI) (CA INDEX NAME)

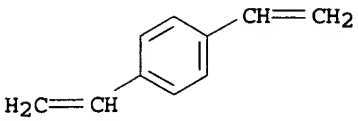
CM 1

CRN 20441-06-9
CMF C38 H32 N2



CM 2

CRN 105-06-6
CMF C10 H10

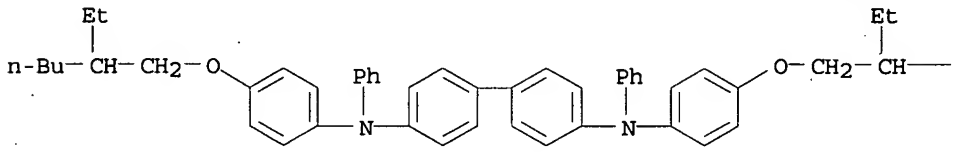


RN 437606-04-7 HCAPLUS
CN [1,1'-Biphenyl]-4,4'-diamine, N,N'-bis[4-[(2-ethylhexyl)oxy]phenyl]-N,N'-diphenyl-, polymer with 1,4-diethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 437606-01-4
CMF C52 H60 N2 O2

PAGE 1-A

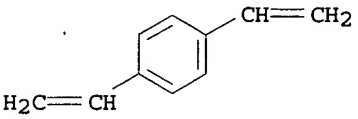


PAGE 1-B

—Bu-n

CM 2

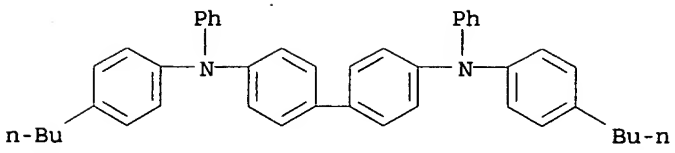
CRN 105-06-6
CMF C10 H10



IT **437606-03-6P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of new hole transport polymers via copolymn. of N,N'-di-Ph-N,N'-bis(4-alkylphenyl)benzidine (TPD) derivs. with 1,4-divinylbenzene)
RN 437606-03-6 HCAPLUS
CN [1,1'-Biphenyl]-4,4'-diamine, N,N'-bis(4-butylphenyl)-N,N'-diphenyl-, polymer with 1,4-diethenylbenzene (9CI) (CA INDEX NAME)

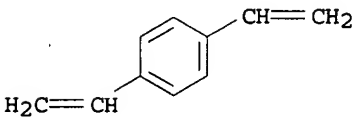
CM 1

CRN 79183-76-9
CMF C44 H44 N2



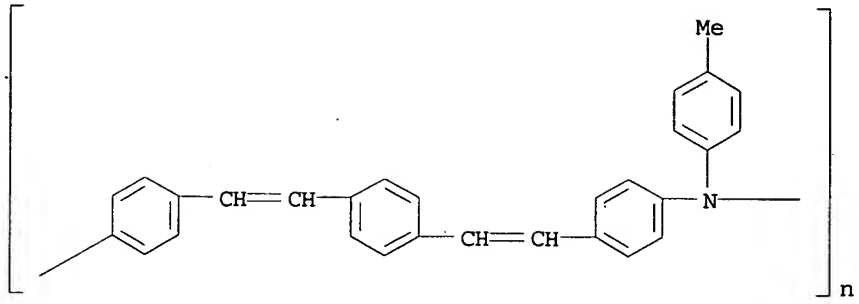
CM 2

CRN 105-06-6
CMF C10 H10

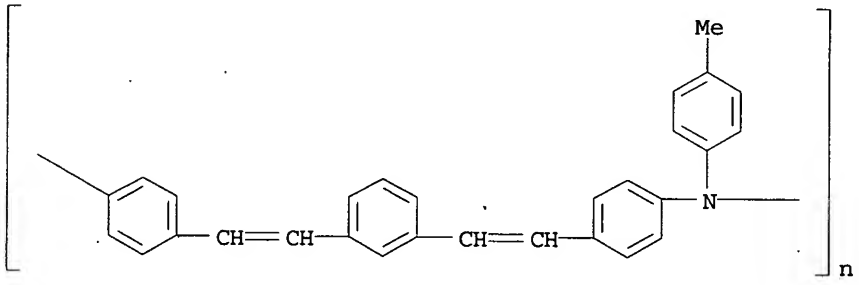


CC 35-7 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 76
IT **437606-02-5P 437606-04-7P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation of new hole transport polymers via copolymn. of N,N'-di-Ph-N,N'-bis(4-alkylphenyl)benzidine (TPD) derivs. with 1,4-divinylbenzene)
IT **437606-03-6P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of new hole transport polymers via copolymn. of N,N'-di-Ph-N,N'-bis(4-alkylphenyl)benzidine (TPD) derivs. with 1,4-divinylbenzene)

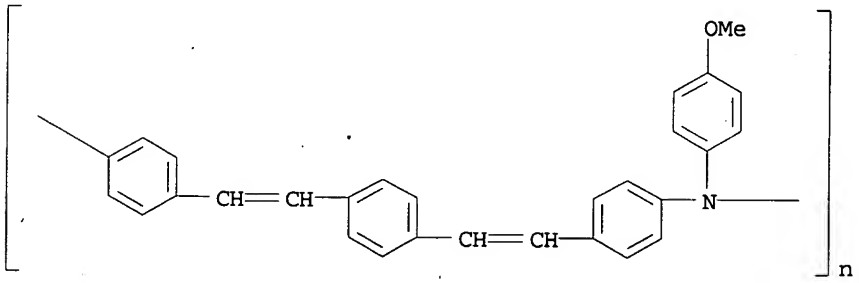
L84 ANSWER 26 OF 119 HCAPLUS COPYRIGHT 2005 ACS on STN
2002:91396 Document No. 136:310518 Electroluminescence of poly(phenylenevinylene)s containing triphenylamine moieties in the main chain. Pu, Yong-Jin; Soma, Minoru; Nishide, Hiroyuki; Shirai, Satoshi; Kido, Junji (Department of Applied Chemistry, Waseda University, Tokyo, 169-8555, Japan). Japanese Journal of Applied Physics, Part 1: Regular Papers, Short Notes & Review Papers, 41(1), 362-365 (English) 2002. CODEN: JAPNDE. Publisher: Japan Society of Applied Physics.
IT **89119-13-1 217632-29-6 313242-54-5 313242-55-6**
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(electroluminescence of)
RN 89119-13-1 HCAPLUS
CN Poly[[(4-methylphenyl)imino]-1,4-phenylene-1,2-ethenediyl-1,4-phenylene-1,2-ethenediyl-1,4-phenylene] (9CI) (CA INDEX NAME)



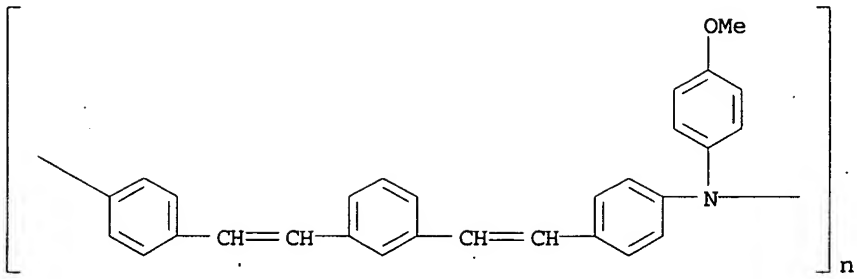
RN 217632-29-6 HCAPLUS
CN Poly[[(4-methylphenyl)imino]-1,4-phenylene-1,2-ethenediyl-1,3-phenylene-1,2-ethenediyl-1,4-phenylene] (9CI) (CA INDEX NAME)



RN 313242-54-5 HCAPLUS
CN Poly[[(4-methoxyphenyl)imino]-1,4-phenylene-1,2-ethenediyl-1,4-phenylene-1,2-ethenediyl-1,4-phenylene] (9CI) (CA INDEX NAME)



RN 313242-55-6 HCAPLUS
CN Poly[[(4-methoxyphenyl)imino]-1,4-phenylene-1,2-ethenediyl-1,3-phenylene-1,2-ethenediyl-1,4-phenylene] (9CI) (CA INDEX NAME)



CC 37-5 (Plastics Manufacture and Processing)
Section cross-reference(s): 73
IT **89119-13-1 217632-29-6 313242-54-5**
313242-55-6
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(electroluminescence of)

L84 ANSWER 31 OF 119 HCAPLUS COPYRIGHT 2005 ACS on STN
2001:595553 Document No. 135:172964 Electrophotographic photoreceptor having undercoat layer and intermediate layer and image forming method. Ikuno, Hiroshi; Kojima, Shigeto; Kurimoto, Eiji (Ricoh Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2001222124 A2 20010817, 28 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2000-29327 20000207.
IT **244635-70-9 247050-47-1**
RL: DEV (Device component use); USES (Uses)
(charge-transporting agent; electrophotog. photoreceptor with undercoat layer containing metal oxide and intermediate layer containing carbon)
RN 244635-70-9 HCAPLUS
CN Carbonic dichloride, polymer with 4,4'-cyclohexylidenebis[phenol] and 4,4'-[1,4-phenylenebis[2,1-ethenediyl-4,1-phenylene(phenylimino)]]bis[phenol] (9CI) (CA INDEX NAME)

CM 1

CRN 152849-02-0
CMF C46 H36 N2 O2

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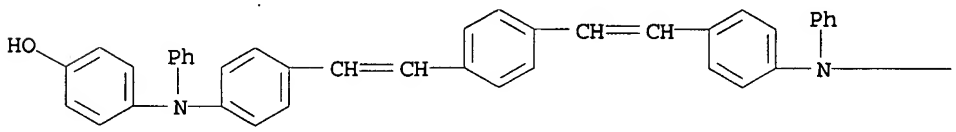

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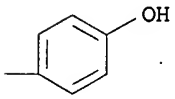
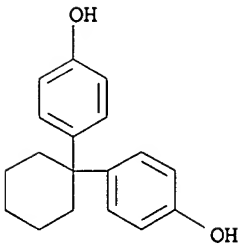


CM 2

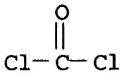
CRN 843-55-0

CMF C18 H20 O2



CM 3

CRN 75-44-5
CMF C Cl2 O



RN 247050-47-1 HCAPLUS
CN Carbonic dichloride, polymer with 1,6-hexanediol and 4,4'-[1,4-phenylenebis[2,1-ethenediyl-4,1-phenylene(phenylimino)]]bis[phenol] (9CI) (CA INDEX NAME)

CM 1

CRN 152849-02-0
CMF C46 H36 N2 O2

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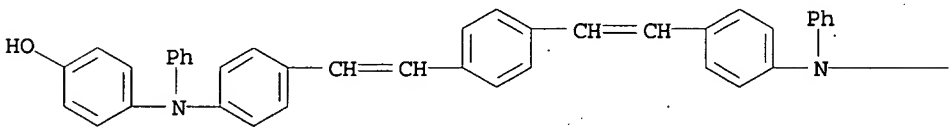
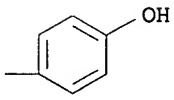
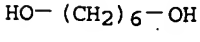


PAGE 1-B



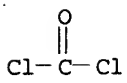
CM 2

CRN 629-11-8
CMF C6 H14 O2



CM 3

CRN 75-44-5
CMF C Cl2 O



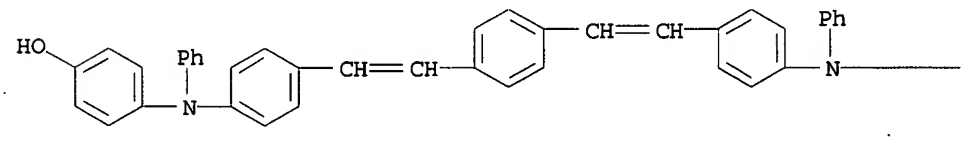
IC ICM G03G005-14
ICS G03G005-14; G03G005-05; G03G005-06; G03G005-07; G03G015-02; G03G015-04; G03G015-08
CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
IT **244635-70-9** 247050-45-9 **247050-47-1**
354585-74-3 354585-75-4 354585-77-6 354585-80-1 354585-82-3
354585-84-5 354585-85-6
RL: DEV (Device component use); USES (Uses)
(charge-transporting agent; electrophotog. photoreceptor with undercoat layer containing metal oxide and intermediate layer containing carbon)

L84 ANSWER 36 OF 119 HCAPLUS COPYRIGHT 2005 ACS on STN
2001:299143 Document No. 134:318642 Electrophotographic photoconductor, method and apparatus for electrophotographic printing, and process cartridge for the apparatus. Niimi, Tatsuya; Suzuki, Tetsuro (Ricoh Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2001117249 A2 20010427, 43 pp. (Japanese). CODEN: JKXXAF.
APPLICATION: JP 1999-299145 19991021.
IT **236100-21-3**
RL: TEM (Technical or engineered material use); USES (Uses)
(electrophotog. photoconductor using titanyl phthalocyanine and charge-transporting agent with regulated charge carrier mobility)
RN 236100-21-3 HCAPLUS
CN Carbonic acid, polymer with 4,4'-cyclohexylidenebis[phenol] and 4,4'-[1,4-phenylenebis[2,1-ethenediyl-4,1-phenylene(phenylimino)]]bis[phenol] (9CI) (CA INDEX NAME)

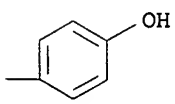
CM 1

CRN 152849-02-0
CMF C46 H36 N2 O2

PAGE 1-A

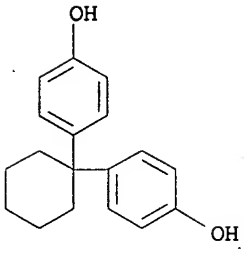


PAGE 1-B



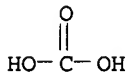
CM 2

CRN 843-55-0
CMF C18 H20 O2



CM 3

CRN 463-79-6
CMF C H2 O3



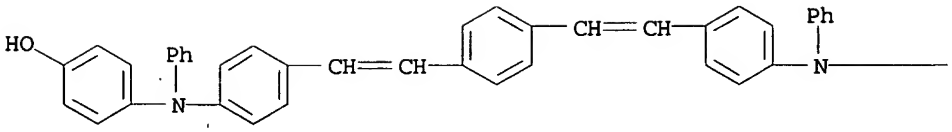
IC ICM G03G005-06
ICS G03G005-06; G03G005-07
CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
IT 70782-27-3 89114-90-9 89114-91-0 111153-52-7 124373-59-7
127697-06-7 131625-67-7 147598-26-3 159390-47-3 159390-64-4
200423-28-5 200423-52-5 200423-68-3 201419-94-5
236100-21-3 335417-25-9
RL: TEM (Technical or engineered material use); USES (Uses)
(electrophotog. photoconductor using titanyl phthalocyanine and charge-transporting agent with regulated charge carrier mobility)

L84 ANSWER 41 OF 119 HCAPLUS COPYRIGHT 2005 ACS on STN
2000:861220 Document No. 134:49154 Hole-transporting polymer and electrophotographic photoreceptor. Nagai, Kazukiyo; Sasaki, Masaomi; Lee, Hong Kook; Kawamura, Shinichi; Suzuka, Susumu; Morooka, Katsuhiro (Ricoh Co., Ltd., Japan; Hodogaya Chemical Co., Ltd.). Jpn. Kokai Tokkyo Koho JP 2000338698 A2 20001208, 26 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1999-146872 19990526.
IT **312612-13-8P 312612-14-9P 312612-15-0P**
312612-16-1P 312612-20-7P 312612-21-8P
RL: DEV (Device component use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(hole-transporting polymer for electrophotog. photoreceptor)
RN 312612-13-8 HCAPLUS
CN Phenol, 4,4'-[1,4-phenylenebis[2,1-ethenediyl-4,1-phenylene(phenylimino)]]bis-, polymer with 1,6-diisocyanatohexane (9CI) (CA INDEX NAME)

CM 1

CRN 152849-02-0
CMF C46 H36 N2 O2

PAGE 1-A



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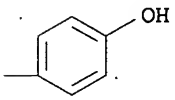

CM 2

CRN 822-06-0
CMF C8 H12 N2 O2

$OCN-(CH_2)_6-NCO$

RN 312612-14-9 HCAPLUS
CN Phenol, 4,4'-[1,4-phenylenebis[2,1-ethenediyl-4,1-phenylene(phenylimino)]]bis-, polymer with 1,1'-methylenebis[4-isocyanatobenzene] (9CI) (CA INDEX NAME)

CM 1

CRN 152849-02-0
CMF C46 H36 N2 O2

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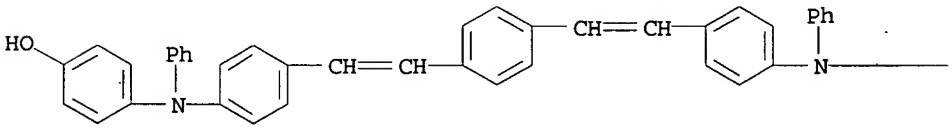

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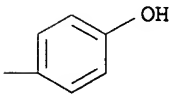
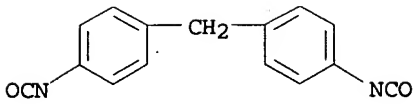


CM 2

CRN 101-68-8
CMF C15 H10 N2 O2



RN 312612-15-0 HCAPLUS
CN Phenol, 4,4'-[1,4-phenylenebis[2,1-ethenediyl-4,1-phenylene(phenylimino)]]bis-, polymer with 2,4-diisocyanato-1-methylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 152849-02-0
CMF C46 H36 N2 O2

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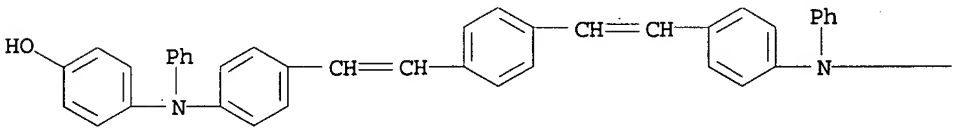

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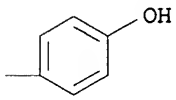
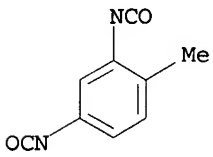


CM 2

CRN 584-84-9
CMF C9 H6 N2 O2



RN 312612-16-1 HCAPLUS
CN Phenol, 4,4'-[1,4-phenylenebis[2,1-ethenediyl-4,1-phenylene(phenylimino)]]bis-, polymer with 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane (9CI) (CA INDEX NAME)

CM 1

CRN 152849-02-0
CMF C46 H36 N2 O2

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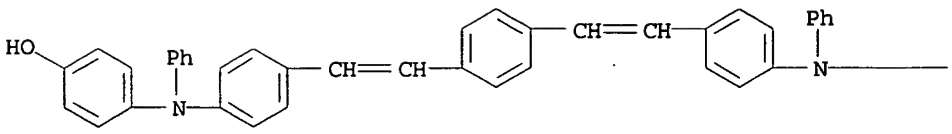

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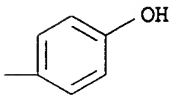
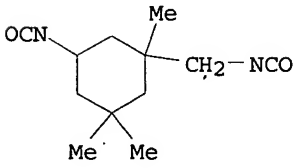


CM 2

CRN 4098-71-9
CMF C12 H18 N2 O2



RN 312612-20-7 HCAPLUS
CN Poly[oxycarbonylimino-1,6-hexanediyliminocarbonyloxy-1,4-phenylene(phenylimino)-1,4-phenylene-1,2-ethenediyl-1,4-phenylene-1,2-ethenediyl-1,4-phenylene(phenylimino)-1,4-phenylene] (9CI) (CA INDEX NAME)

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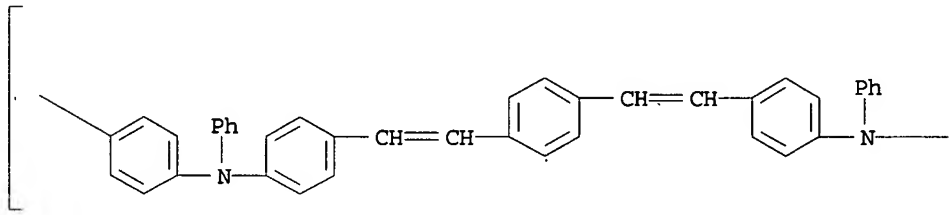

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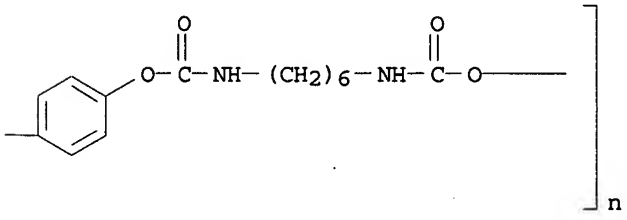

RN 312612-21-8 HCAPLUS

CN Poly[oxycarbonylimino-1,4-phenylenemethylene-1,4-phenyleneiminocarbonyloxy-1,4-phenylene(phenylimino)-1,4-phenylene-1,2-ethenediyl-1,4-phenylene-1,2-ethenediyl-1,4-phenylene(phenylimino)-1,4-phenylene] (9CI) (CA INDEX NAME)

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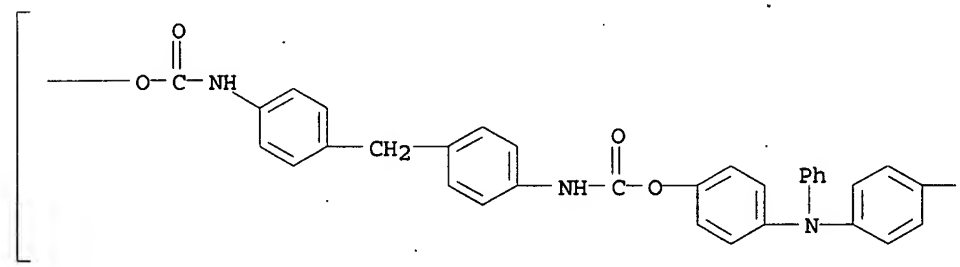

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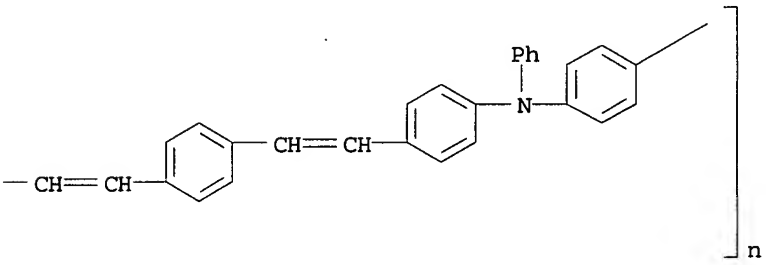
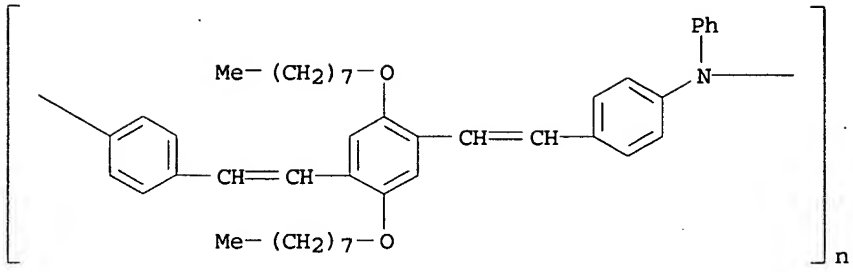


IC ICM G03G005-07
ICS C08G018-32
CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 35, 38, 76
IT **312612-13-8P 312612-14-9P 312612-15-0P**
312612-16-1P 312612-17-2P 312612-18-3P 312612-19-4P
312612-20-7P 312612-21-8P 312612-22-9P
312612-23-0P 312774-17-7P 312774-24-6P
RL: DEV (Device component use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(hole-transporting polymer for electrophotog. photoreceptor)

L84 ANSWER 46 OF 119 HCAPLUS COPYRIGHT 2005 ACS on STN
2000:556215 Document No. 133:238620 Optoelectronic processes in π-conjugated oligomers and polymers. Barth, S.; Bassler, H.; Hertel, D.; Nikitenko, V. I.; Wolf, U. (Inst. Phys. Chem., Makromol. Chem. Kernchem., Zentrum Materialwissenschaften, Philipps Univ., Marburg, D-35032, Germany). Pure and Applied Chemistry, 71(11), 2067-2077 (English) 1999. CODEN: PACHAS. ISSN: 0033-4545. Publisher: Blackwell Science Ltd..
IT **188744-21-0**
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(optoelectronic processes in π-conjugated oligomers and polymers)
RN 188744-21-0 HCAPLUS
CN Poly[(phenylimino)-1,4-phenylene-1,2-ethenediyl[2,5-bis(octyloxy)-1,4-phenylene]-1,2-ethenediyl-1,4-phenylene] (9CI) (CA INDEX NAME)



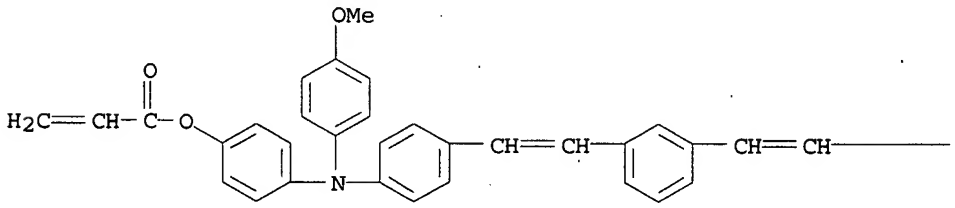
CC 36-5 (Physical Properties of Synthetic High Polymers)
Section cross-reference(s): 73
IT 7429-90-5, Aluminum, properties 7439-95-4, Magnesium, properties 7440-22-4, Silver, properties 171865-00-2**188744-21-0**
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(optoelectronic processes in π-conjugated oligomers and polymers)

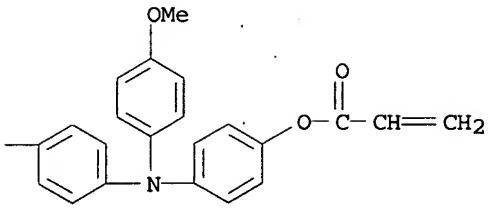
L84 ANSWER 51 OF 119 HCAPLUS COPYRIGHT 2005 ACS on STN
2000:356743 Document No. 132:354716 Electrophotographic photoconductor, process cartridge, and electrophotographic apparatus. Maruyama, Akio; Uematsu, Hironori; Kikuchi, Norihiro; Amanomiya, Shoji; Sekiya, Michiyo (Canon Inc., Japan). Jpn. Kokai Tokkyo Koho JP 2000147815 A2 20000526, 113 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1998-322740 19981113.
IT **269402-89-3**
RL: DEV (Device component use); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)
(polymerized pos. hole transport substance for electrophotog. photoconductor)
RN 269402-89-3 HCAPLUS
CN 2-Propenoic acid, 1,3-phenylenebis[2,1-ethenediyl-4,1-phenylene[(4-methoxyphenyl)imino]-4,1-phenylene] ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 269402-88-2
CMF C54 H44 N2 O6

PAGE 1-A



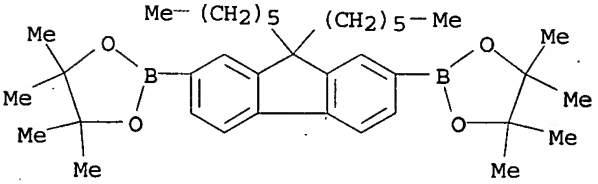


IC ICM G03G005-07
ICS G03G005-047; G03G005-06
CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT 268222-38-4 268222-41-9 268222-61-3 268222-68-0 268223-02-5
269402-73-5 269402-75-7 269402-79-1 269402-83-7 269402-86-0
269402-87-1 **269402-89-3** 269402-91-7 269402-93-9
269402-95-1 269402-97-3 269402-99-5 269403-01-2 269403-03-4
269403-05-6 269403-12-5
RL: DEV (Device component use); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)
(polymerized pos. hole transport substance for electrophotog. photoconductor)

L84 ANSWER 56 OF 119 HCAPLUS COPYRIGHT 2005 ACS on STN
2000:43387 Document No. 132:100536 Compound involving styryl-type repeating unit, manufacture of the compound, and blue light-emitting electroluminescent device using the polymer. Igarashi, Tatsuya (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2000017057 A2 20000118, 15 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1999-118266 19990426. PRIORITY: JP 1998-120842 19980430.
IT **254755-25-4P 254755-26-5P**
RL: DEV (Device component use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)
(preparation of styryl polymer by using palladium catalyst for blue light-emitting electroluminescent device)
RN 254755-25-4 HCAPLUS
CN Benzenamine, 4,4'-[(2,5-dibromo-1,4-phenylene)di-2,1-ethenediyl]bis[N,N-diphenyl-, polymer with 2,2'-(9,9-dihexyl-9H-fluorene-2,7-diyl)bis[4,4,5,5-tetramethyl-1,3,2-dioxaborolane] (9CI) (CA INDEX NAME)

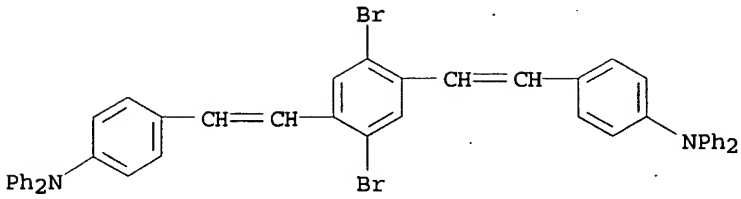
CM 1

CRN 254755-24-3
CMF C37 H56 B2 O4



CM 2

CRN 214626-73-0
CMF C46 H34 Br2 N2



RN 254755-26-5 HCAPLUS
CN Poly[(9,9-dihexyl-9H-fluorene-2,7-diyl)[2,5-bis[2-[4-(diphenylamino)phenyl]ethenyl]-1,4-phenylene]] (9CI) (CA INDEX NAME)

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *
IC ICM C08G061-10
ICS C08G061-02; C09K011-06; H05B033-14
CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 35, 38
IT 254755-22-1P 254755-23-2P **254755-25-4P**
254755-26-5P
RL: DEV (Device component use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)
(preparation of styryl polymer by using palladium catalyst for blue light-emitting electroluminescent device)

L84 ANSWER 61 OF 119 HCAPLUS COPYRIGHT 2005 ACS on STN
1999:688813 Document No. 131:315813 Electrophotographic photoreceptor with high-sensitivity and high image quality and superior durability. Suzuki, Tetsuo; Tamura, Hiroshi; Kojima, Shigeto; Nagame, Hiroshi; Sakon, Yota; Ikuno, Hiroshi; Kami, Hidetoshi; Kurimoto, Eiji (Ricoh Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 11295911 A2 19991029 Heisei, 31 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1998-101219 19980413.
IT **247050-47-1**
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(charge-transporting material contained in surface layer for electrophotog. photoreceptor)
RN 247050-47-1 HCAPLUS
CN Carbonic dichloride, polymer with 1,6-hexanediol and 4,4'-[1,4-phenylenebis[2,1-ethenediyl-4,1-phenylene(phenylimino)]]bis[phenol] (9CI) (CA INDEX NAME)

CM 1

CRN 152849-02-0
CMF C46 H36 N2 O2

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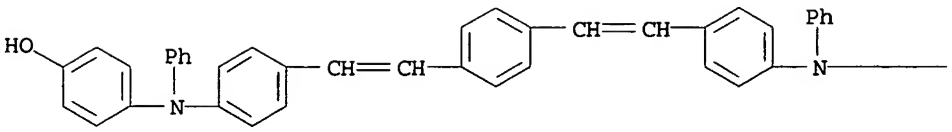

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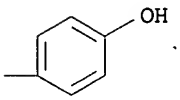
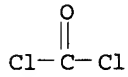


CM 2

CRN 629-11-8
CMF C6 H14 O2

CM 3

CRN 75-44-5
CMF C Cl2 O



IC ICM G03G005-07
CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT 173072-56-5 244635-67-4 244635-68-5 244635-71-0 244635-74-3
247050-47-1 247593-06-2 247593-07-3 247593-08-4
247593-09-5
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(charge-transporting material contained in surface layer for electrophotog. photoreceptor)

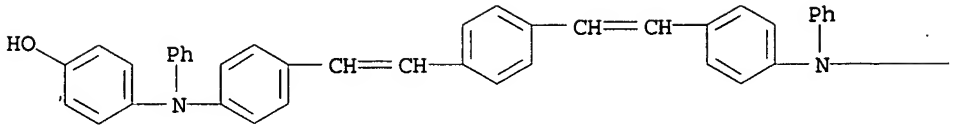
L84 ANSWER 66 OF 119 HCAPLUS COPYRIGHT 2005 ACS on STN
1999:490257 Document No. 131:163349 Electrophotographic photoreceptor containing charge-transporting polymer and polyolefin particles. Suzuki, Tetsuo; Ikuno, Hiroshi; Tamura, Hiroshi; Sakon, Yota; Kojima, Shigeto; Nagame, Hiroshi; Kami, Hidetoshi (Ricoh Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 11212284 A2 19990806 Heisei, 28 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1998-16976 19980129.
IT **200950-62-5**
RL: DEV (Device component use); USES (Uses)
(electrophotog. photoreceptor containing charge-transporting polymer and polyolefin particles)
RN 200950-62-5 HCAPLUS
CN Carbonic acid, polymer with 1,6-hexanediol and 4,4'-[1,4-phenylenebis[2,1-ethenediyl-4,1-phenylene(phenylimino)]]bis[phenol]

(9CI) (CA INDEX NAME)

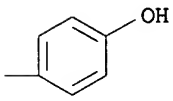
CM 1

CRN 152849-02-0
CMF C46 H36 N2 O2

PAGE 1-A

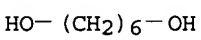


PAGE 1-B



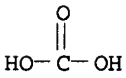
CM 2

CRN 629-11-8
CMF C6 H14 O2



CM 3

CRN 463-79-6
CMF C H2 O3



IC ICM G03G005-07
ICS G03G005-05
CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
IT 157244-37-6 174830-28-5 200423-68-3 200863-48-5 200950-24-9
200950-62-5 201056-07-7 201056-11-3 201337-05-5
237066-46-5
RL: DEV (Device component use); USES (Uses)
(electrophotog. photoreceptor containing charge-transporting polymer and polyolefin particles)

L84 ANSWER 71 OF 119 HCAPLUS COPYRIGHT 2005 ACS on STN
1999:379147 Document No. 131:122474 Synthesis of organic EL materials with cyano group and evaluation of emission characteristics in organic EL devices. Kim, Dong Uk (Dep. Science Education, Taegu National Univ. Education, Taegu, 705-715, S. Korea). Journal of the Korean Chemical Society, 43(3), 315-320 (Korean) 1999. CODEN: JKCSEZ. ISSN: 1017-2548. Publisher: Korean Chemical Society.

IT **232948-25-3P**
RL: PEP (Physical, engineering or chemical process); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)
(organic electroluminescent materials; synthesis of)
RN 232948-25-3 HCAPLUS
CN 1,4-Benzenedicarbonitrile, 2,5-bis[2-[4-[[4-[(6-hydroxyhexyl)oxy]phenyl]phenylamino]phenyl]ethenyl]-, polymer with 1,1'-methylenebis[4-isocyanatobenzene] (9CI) (CA INDEX NAME)

CM 1

CRN 232948-24-2
CMF C60 H58 N4 O4

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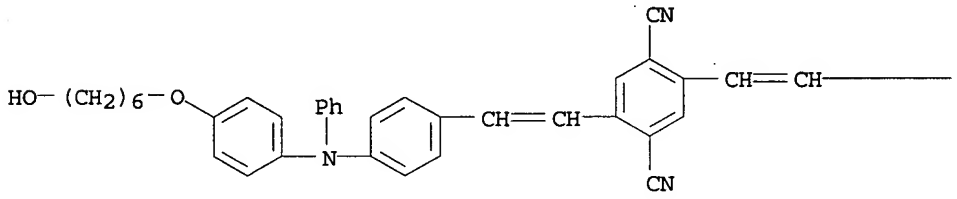

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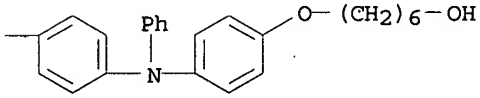
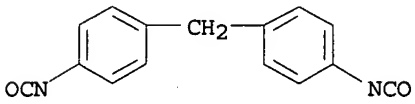


CM 2

CRN 101-68-8
CMF C15 H10 N2 O2



CC 73-5 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
Section cross-reference(s): 22, 35, 76
IT **232948-25-3P** 232948-26-4P
RL: PEP (Physical, engineering or chemical process); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)
(organic electroluminescent materials; synthesis of)

L84 ANSWER 76 OF 119 HCAPLUS COPYRIGHT 2005 ACS on STN
1998:811529 Document No. 130:102663 Organic thin film electroluminescent device. Nagai, Kazukiyo; Shimada, Tomoyuki; Anzai, Mitsutoshi; Imai, Akihiro; Morooka, Katsuhiro; Adachi, Chihaya (Ricoh Co., Ltd., Japan; Hodogaya Chemical Co., Ltd.). Jpn. Kokai Tokkyo Koho JP 10335065 A2 19981218 Heisei, 20 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1997-140036 19970529.

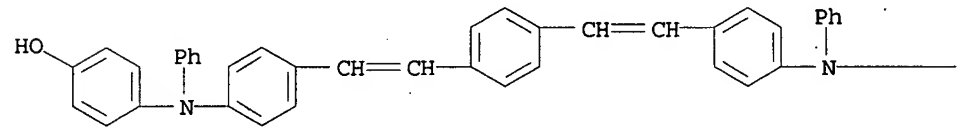
IT **189245-16-7 191926-60-0 191926-61-1**
191926-62-2 191926-63-3 191926-64-4
191926-65-5 219138-76-8 219138-79-1
219138-81-5 219138-83-7 219138-84-8
219138-86-0
RL: DEV (Device component use); USES (Uses)
(electroluminescent material used in organic thin film electroluminescent device)

RN 189245-16-7 HCAPLUS
CN Phenol, 4,4'-[1,4-phenylenebis[2,1-ethenediyl-4,1-phenylene(phenylimino)]]bis-, polymer with α-(chlorocarbonyl)-ω-[(chlorocarbonyl)oxy]poly(oxy-1,4-butanediyl) (9CI) (CA INDEX NAME)

CM 1

CRN 152849-02-0
CMF C46 H36 N2 O2

PAGE 1-A



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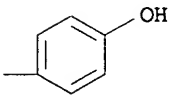
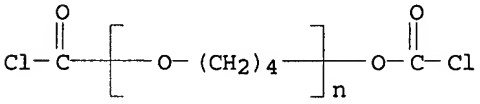


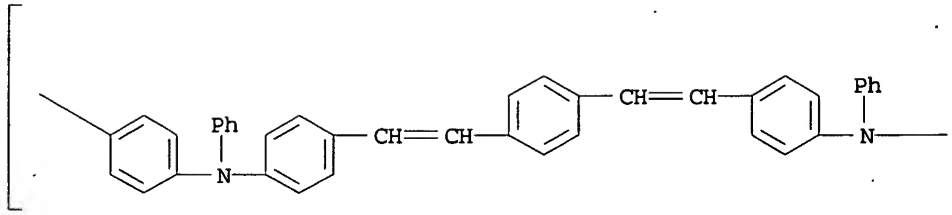
CM 2

CRN 31345-17-2
CMF (C4 H8 O)n C2 Cl2 O3
CCI PMS

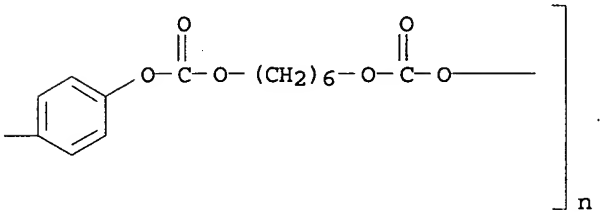


RN 191926-60-0 HCAPLUS
CN Poly[oxycarbonyloxy-1,6-hexanediyloxycarbonyloxy-1,4-phenylene(phenylimino)-1,4-phenylene-1,2-ethenediyl-1,4-phenylene-1,2-ethenediyl-1,4-phenylene(phenylimino)-1,4-phenylene] (9CI) (CA INDEX NAME)

PAGE 1-A

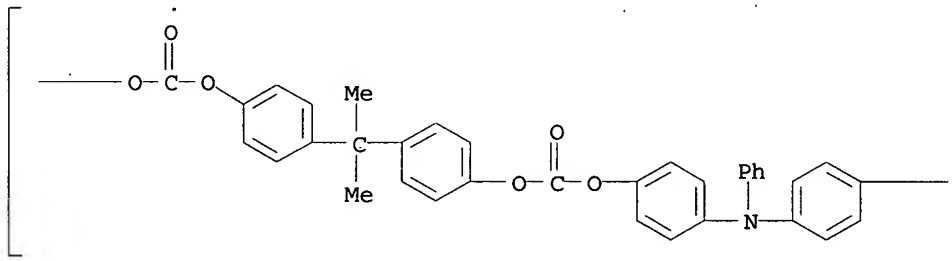


PAGE 1-B



RN 191926-61-1 HCAPLUS
CN Poly[oxycarbonyloxy-1,4-phenylene(1-methylethylidene)-1,4-phenyleneoxycarbonyloxy-1,4-phenylene(phenylimino)-1,4-phenylene-1,2-ethenediyl-1,4-phenylene-1,2-ethenediyl-1,4-phenylene(phenylimino)-1,4-phenylene] (9CI) (CA INDEX NAME)

PAGE 1-A



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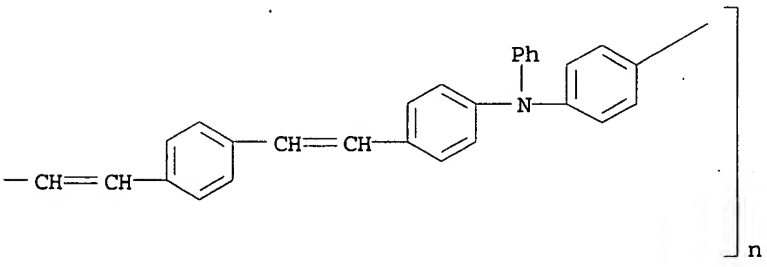
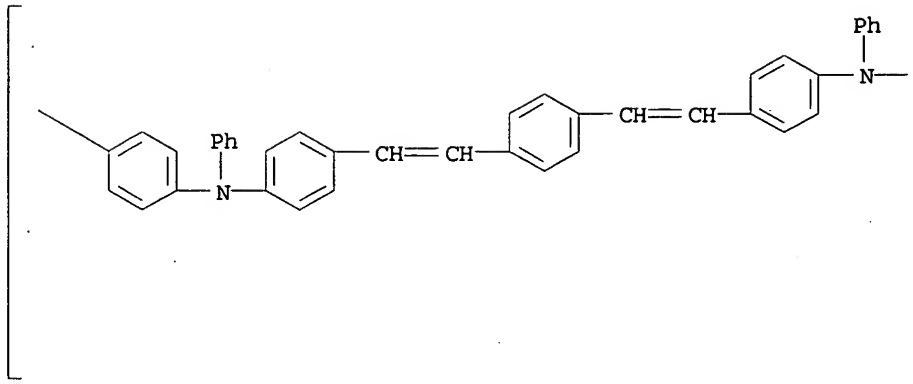


RN 191926-62-2 HCAPLUS
CN Poly[oxycarbonyloxy-1,4-phenylenecyclohexylidene-1,4-phenyleneoxycarbonyloxy-1,4-phenylene(phenylimino)-1,4-phenylene-1,2-ethenediyl-1,4-phenylene-1,2-ethenediyl-1,4-phenylene(phenylimino)-

1,4-phenylene] (9CI) (CA INDEX NAME)

PAGE 1-A



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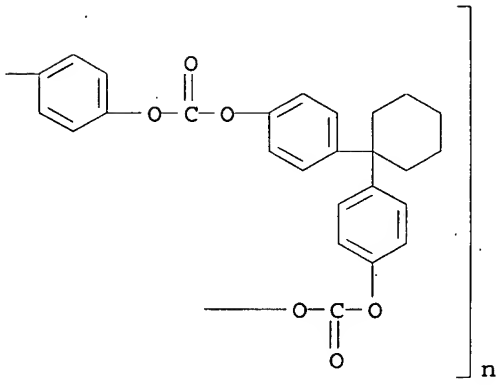
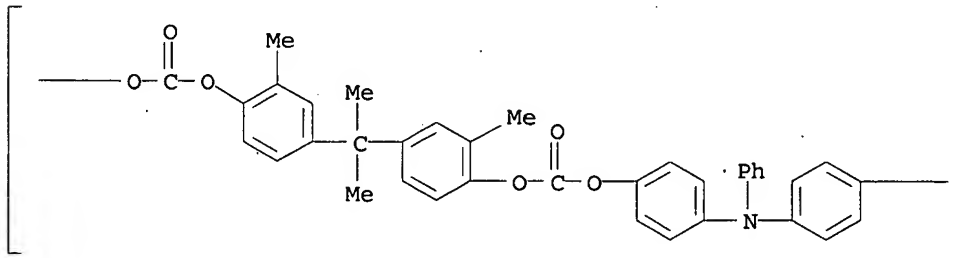
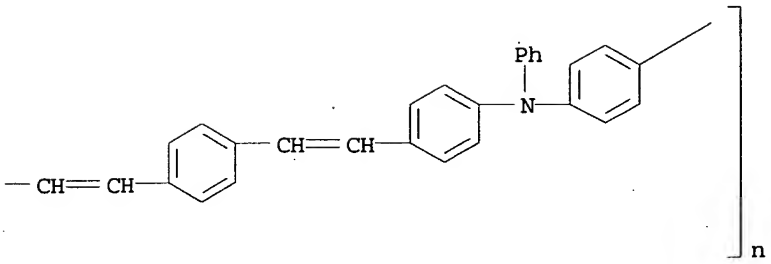


RN 191926-63-3 HCAPLUS
CN Poly[oxycarbonyloxy(2-methyl-1,4-phenylene)(1-methylethylidene)(3-methyl-1,4-phenylene)oxycarbonyloxy-1,4-phenylene(phenylimino)-1,4-phenylene-1,2-ethenediyl-1,4-phenylene-1,2-ethenediyl-1,4-phenylene(phenylimino)-1,4-phenylene] (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



RN 191926-64-4 HCAPLUS
CN Poly[oxycarbonyloxy-1,4-phenyleneethylidene-1,4-phenyleneoxycarbonyloxy-1,4-phenylene(phenylimino)-1,4-phenylene-1,2-ethenediyl-1,4-phenylene-1,2-ethenediyl-1,4-phenylene(phenylimino)-1,4-phenylene] (9CI) (CA INDEX NAME)

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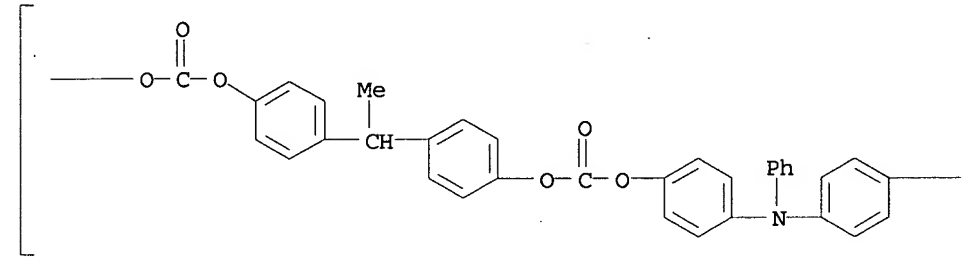
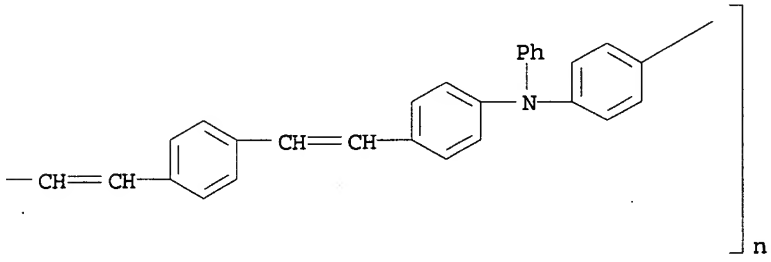


PAGE 1-B



RN 191926-65-5 HCAPLUS
CN Poly[oxycarbonyloxy-1,4-phenylene(1-methylpropylidene)-1,4-phenyleneoxycarbonyloxy-1,4-phenylene(phenylimino)-1,4-phenylene-1,2-ethenediyl-1,4-phenylene-1,2-ethenediyl-1,4-phenylene(phenylimino)-1,4-phenylene] (9CI) (CA INDEX NAME)

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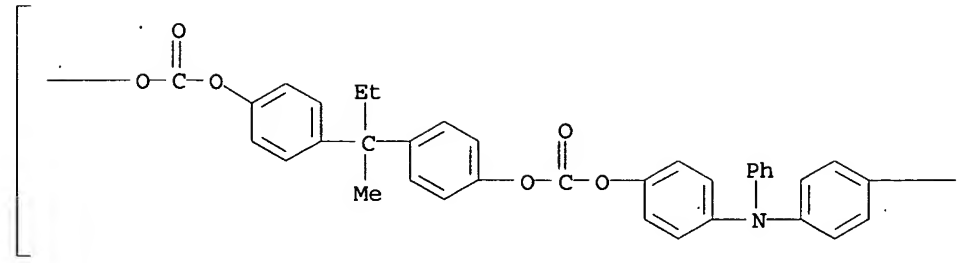

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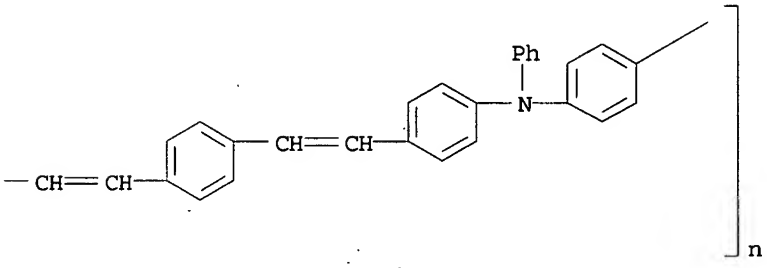
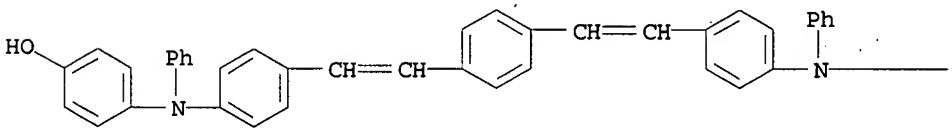


RN 219138-76-8 HCAPLUS
CN Carbonochloridic acid, 1,6-hexanediyl ester, polymer with 4,4'-[1,4-phenylenebis[2,1-ethenediyl-4,1-phenylene(phenylimino)]]bis[phenol] (9CI) (CA INDEX NAME)

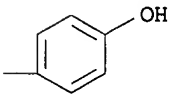
CM 1

CRN 152849-02-0
CMF C46 H36 N2 O2

PAGE 1-A

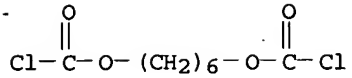


PAGE 1-B



CM 2

CRN 2916-20-3
CMF C8 H12 Cl2 O4

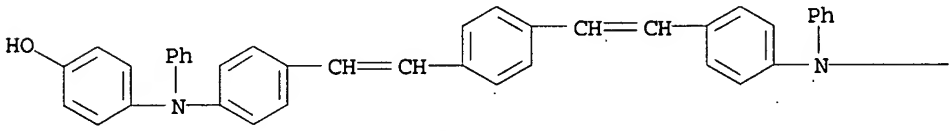


RN 219138-79-1 HCAPLUS
CN Carbonochloridic acid, (1-methylethylidene)di-4,1-phenylene ester, polymer with 4,4'-[1,4-phenylenebis[2,1-ethenediyl-4,1-phenylene(phenylimino)]]bis[phenol] (9CI) (CA INDEX NAME)

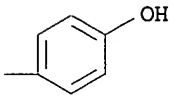
CM 1

CRN 152849-02-0
CMF C46 H36 N2 O2

PAGE 1-A

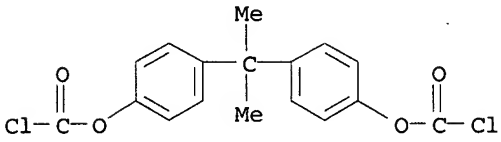


PAGE 1-B



CM 2

CRN 2024-88-6
CMF C17 H14 Cl2 O4

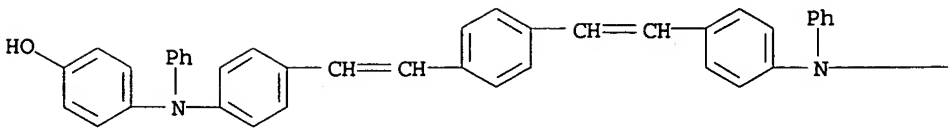


RN 219138-81-5 HCAPLUS
CN Carbonochloridic acid, cyclohexylidenedi-4,1-phenylene ester, polymer with 4,4'-[1,4-phenylenebis[2,1-ethenediyl-4,1-phenylene(phenylimino)]]bis[phenol] (9CI) (CA INDEX NAME)

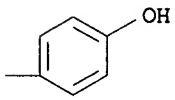
CM 1

CRN 152849-02-0
CMF C46 H36 N2 O2

PAGE 1-A

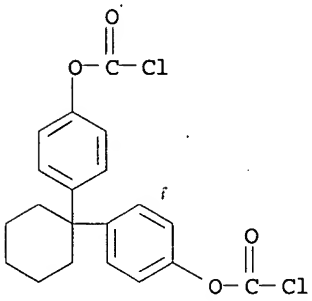


PAGE 1-B



CM 2

CRN 91174-67-3
CMF C20 H18 Cl2 O4

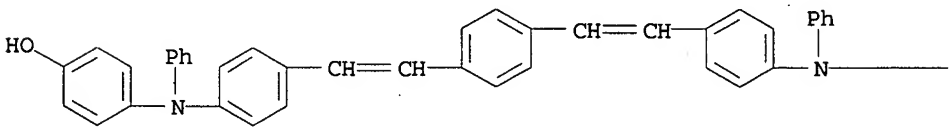


RN 219138-83-7 HCAPLUS
CN Carbonochloridic acid, (1-methylethylidene)bis(2-methyl-4,1-phenylene) ester, polymer with 4,4'-[1,4-phenylenebis[2,1-ethenediyl-4,1-phenylene(phenylimino)]]bis[phenol] (9CI) (CA INDEX NAME)

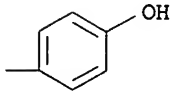
CM 1

CRN 152849-02-0
CMF C46 H36 N2 O2

PAGE 1-A

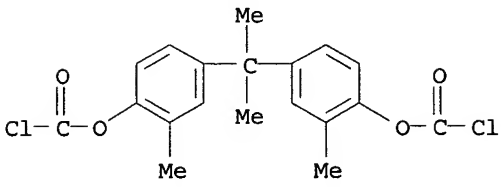


PAGE 1-B



CM 2

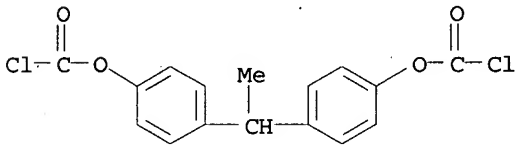
CRN 98884-55-0
CMF C19 H18 Cl2 O4



RN 219138-84-8 HCAPLUS
CN Carbonochloridic acid, ethylidenedi-4,1-phenylene ester, polymer with 4,4'-[1,4-phenylenebis[2,1-ethenediyl-4,1-phenylene(phenylimino)]]bis[phenol] (9CI) (CA INDEX NAME)

CM 1

CRN 189245-28-1
CMF C16 H12 Cl2 O4



CM 2

CRN 152849-02-0
CMF C46 H36 N2 O2

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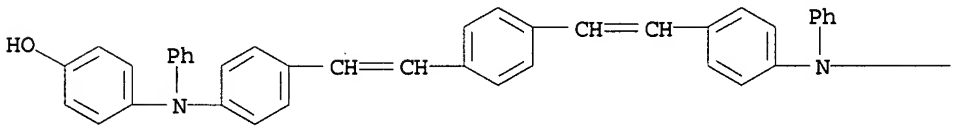
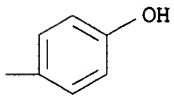


PAGE 1-B



RN 219138-86-0 HCAPLUS
CN Carbonochloridic acid, (1-methylpropylidene)di-4,1-phenylene ester, polymer with 4,4'-[1,4-phenylenebis[2,1-ethenediyl-4,1-phenylene(phenylimino)]]bis[phenol] (9CI) (CA INDEX NAME)

CM 1

CRN 152849-02-0
CMF C46 H36 N2 O2

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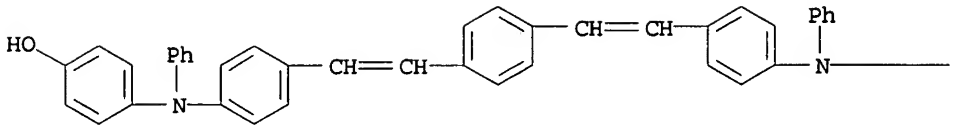
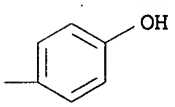
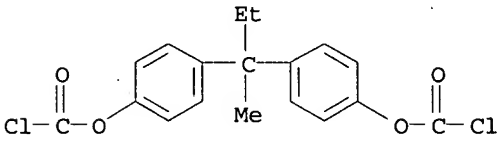


PAGE 1-B



CM 2

CRN 58054-95-8
CMF C18 H16 Cl2 O4



IC ICM H05B033-14
ICS C09K011-06
CC 73-11 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
Section cross-reference(s): 38
IT **189245-16-7** 190383-42-7 190383-44-9 190383-46-1
190383-48-3 190383-49-4 190383-50-7 190383-51-8 190383-52-9
191926-49-5 **191926-60-0 191926-61-1**
191926-62-2 191926-63-3 191926-64-4
191926-65-5 219138-76-8 219138-79-1
219138-81-5 219138-83-7 219138-84-8
219138-86-0
RL: DEV (Device component use); USES (Uses)
(electroluminescent material used in organic thin film electroluminescent device)

L84 ANSWER 81 OF 119 HCAPLUS COPYRIGHT 2005 ACS on STN
1998:656185 Document No. 129:337618 Electrophotographic process with improved repeating durability. Arami, Tatsuya (Ricoh Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 10268538 A2 19981009 Heisei, 52 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1997-87240 19970324.
IT **200863-50-9**
RL: DEV (Device component use); USES (Uses)
(charge transporter; electrophotog. process using photoreceptor containing azo compound charge generator)
RN 200863-50-9 HCAPLUS
CN Carbonic acid, polymer with 4,4'-(1-methylethylidene)bis[phenol] and 4,4''-[1,4-phenylenebis[2,1-ethenediyl-4,1-phenylene(phenylimino)]]bis[phenol] (9CI) (CA INDEX NAME)

CM 1

CRN 152849-02-0
CMF C46 H36 N2 O2

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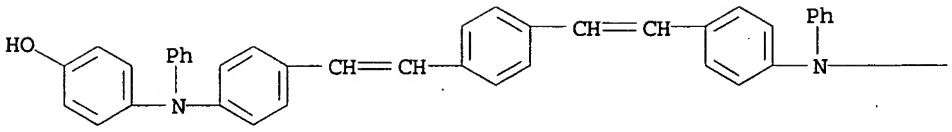
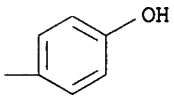
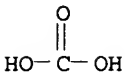


PAGE 1-B



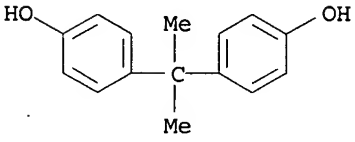
CM 2

CRN 463-79-6
CMF C H2 O3



CM 3

CRN 80-05-7
CMF C15 H16 O2



IC ICM G03G005-06
ICS G03G005-06; C08G064-16; G03G005-07; G03G021-08; C07D209-48; C07D209-82; C07D209-86; C07D209-88; C07D213-53; C07D221-14; C07D231-26; C07D231-56; C07D235-12; C07D235-26; C07D235-28; C07D307-52; C07D307-91; C07D333-22; C07D471-04

CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 25, 38

IT 174830-28-5 200863-48-5 200863-49-6200863-50-9
200863-53-2 200863-58-7 200950-71-6 201205-91-6 215121-41-8
215121-42-9
RL: DEV (Device component use); USES (Uses)
(charge transporter; electrophotog. process using photoreceptor containing azo compound charge generator)

L84 ANSWER 88 OF 119 HCAPLUS COPYRIGHT 2005 ACS on STN

1997:796183 Document No. 128:108429 Electrophotographic photoreceptor containing polymer charge-transporting agent and organic phosphite. Tamura, Hiroshi; Suzuki, Tetsuo; Arami, Tatsuya; Kishida, Koshi; Kami, Hidenori (Ricoh Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 09319120 A2 19971212 Heisei, 50 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1996-151807 19960524.

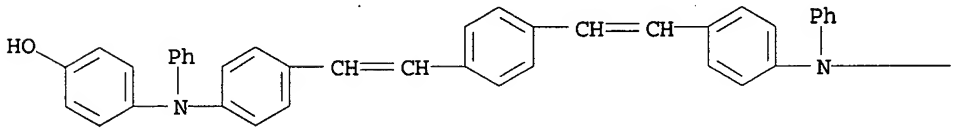
IT **200950-62-5 201362-38-1**
RL: DEV (Device component use); USES (Uses)
(electrophotog. photoreceptor containing polycarbonate charge-transporting agent and organic phosphite)

RN 200950-62-5 HCAPLUS
CN Carbonic acid, polymer with 1,6-hexanediol and 4,4'-[1,4-phenylenebis[2,1-ethenediyl-4,1-phenylene(phenylimino)]]bis[phenol] (9CI) (CA INDEX NAME)

CM 1

CRN 152849-02-0
CMF C46 H36 N2 O2

PAGE 1-A



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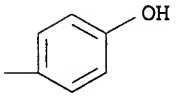
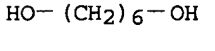


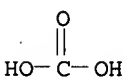
CM 2

CRN 629-11-8
CMF C6 H14 O2



CM 3

CRN 463-79-6
CMF C H2 O3



RN 201362-38-1 HCAPLUS
CN Carbonic acid, polymer with α-hydro-ω-hydroxypoly(oxy-1,4-butanediyl) and 4,4'-[1,4-phenylenebis[2,1-ethenediyl-4,1-phenylene(phenylimino)]]bis[phenol] (9CI) (CA INDEX NAME)

CM 1

CRN 152849-02-0
CMF C46 H36 N2 O2

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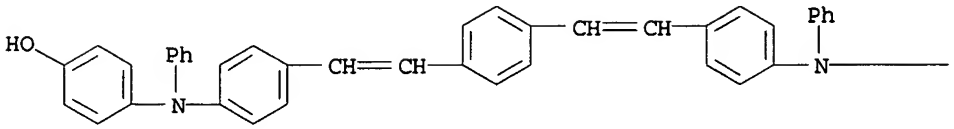

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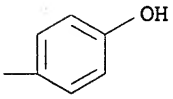
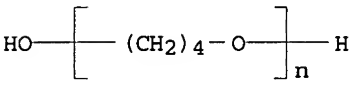


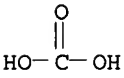
CM 2

CRN 25190-06-1
CMF (C4 H8 O)n H2 O
CCI PMS



CM 3

CRN 463-79-6
CMF C H2 O3



IC ICM G03G005-07
ICS C08K005-521; C08L069-00; C08L083-14; G03G005-05
CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT 120359-10-6 160380-07-4 173072-53-2 174829-96-0 174830-28-5
174830-33-2 178889-17-3 200423-27-4 200950-32-9 200950-55-6
200950-62-5 201135-07-1 201136-22-3 201158-20-5
201300-43-8 201337-49-7 201337-58-8 201361-79-7
201362-38-1 201423-16-7 201423-26-9 201469-69-4
RL: DEV (Device component use); USES (Uses)
(electrophotog. photoreceptor containing polycarbonate charge-transporting agent and organic phosphite)

L84 ANSWER 91 OF 119 HCAPLUS COPYRIGHT 2005 ACS on STN
1997:796176 Document No. 128:108424 Electrophotographic photoreceptor using polymer charge-transporting substance. Tamura, Hiroshi; Suzuki, Tetsuo; Ikino, Hiroshi; Nagame, Hiroshi; Aoto, Atsushi; Kojima, Shigeto; Arami, Tatsuya; Kami, Eri (Ricoh Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 09319106 A2 19971212 Heisei, 43 pp.

(Japanese). CODEN: JKXXAF. APPLICATION: JP 1996-151810 19960524.

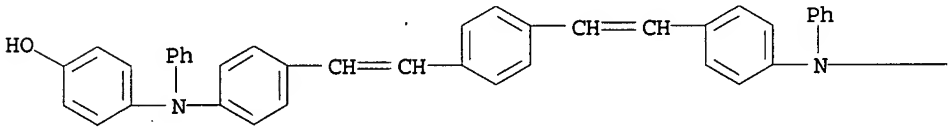
IT **200950-62-5 201362-38-1**
RL: DEV (Device component use); USES (Uses)
(electrophotog. photoreceptor containing polymer charge-transporting agent and compound with hindered amine and phenol groups)

RN 200950-62-5 HCAPLUS
CN Carbonic acid, polymer with 1,6-hexanediol and 4,4'-[1,4-phenylenebis[2,1-ethenediyl-4,1-phenylene(phenylimino)]]bis[phenol] (9CI) (CA INDEX NAME)

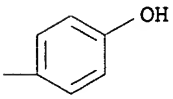
CM 1

CRN 152849-02-0
CMF C46 H36 N2 O2

PAGE 1-A

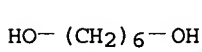


PAGE 1-B



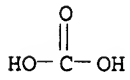
CM 2

CRN 629-11-8
CMF C6 H14 O2



CM 3

CRN 463-79-6
CMF C H2 O3



RN 201362-38-1 HCAPLUS
CN Carbonic acid, polymer with α-hydro-ω-hydroxypoly(oxy-1,4-butanediyl) and 4,4'-[1,4-phenylenebis[2,1-ethenediyl-4,1-phenylene(phenylimino)]]bis[phenol] (9CI) (CA INDEX NAME)

CM 1

CRN 152849-02-0
CMF C46 H36 N2 O2

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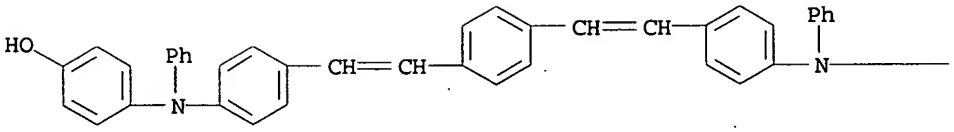
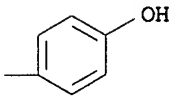
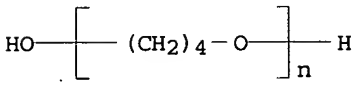


PAGE 1-B



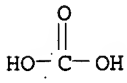
CM 2

CRN 25190-06-1
CMF (C4 H8 O)n H2 O
CCI PMS



CM 3

CRN 463-79-6
CMF C H2 O3



IC ICM G03G005-05
ICS G03G005-07
CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT 120359-10-6 160380-07-4 173072-53-2 174829-96-0 174830-33-2
178889-17-3 198983-20-9 200423-27-4 200950-32-9 200950-55-6
200950-62-5 201135-07-1 201136-22-3 201148-52-9
201158-20-5 201300-43-8 201337-49-7 201337-58-8 201361-79-7
201362-38-1 201423-16-7 201423-26-9
RL: DEV (Device component use); USES (Uses)
(electrophotog. photoreceptor containing polymer charge-transporting agent and compound with hindered amine and phenol groups)

L84 ANSWER 96 OF 119 HCAPLUS COPYRIGHT 2005 ACS on STN
1997:794041 Document No. 128:108403 Electrophotographic photoreceptor using polycarbonate charge-transporting agent. Miimi, Tatsuya; Nagame, Hiroshi; Tamura, Hiroshi; Kojima, Shigeto; Aoto, Jun; Suzuki, Tetsuo; Ikino, Hiroshi; Kami, Hidetoshi (Ricoh Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 09319101 A2 19971212 Heisei, 113 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1996-151816 19960524.
IT **200863-50-9**
RL: DEV (Device component use); USES (Uses)
(electrophotog. photoreceptor containing polycarbonate

charge-transporting agent)

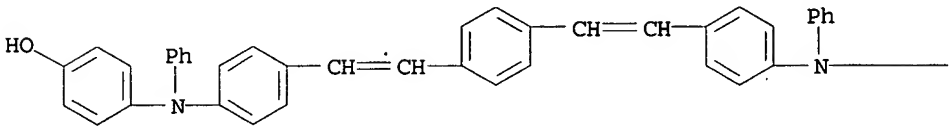
RN 200863-50-9 HCAPLUS

CN Carbonic acid, polymer with 4,4'-(1-methylethylidene)bis[phenol] and 4,4'-[1,4-phenylenebis[2,1-ethenediyl-4,1-phenylene(phenylimino)]]bis[phenol] (9CI) (CA INDEX NAME)

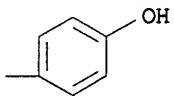
CM 1

CRN 152849-02-0
CMF C46 H36 N2 O2

PAGE 1-A

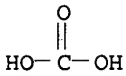


PAGE 1-B



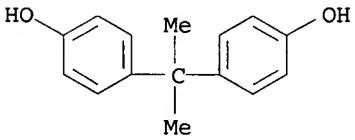
CM 2

CRN 463-79-6
CMF C H2 O3



CM 3

CRN 80-05-7
CMF C15 H16 O2



IC ICM G03G005-047
ICS G03G005-07

CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT 174830-28-5 200423-28-5 200863-48-5**200863-50-9**
200950-24-9 200950-55-6 200950-67-0 201056-07-7 201300-43-8
201300-45-0
RL: DEV (Device component use); USES (Uses)
(electrophotog. photoreceptor containing polycarbonate charge-transporting agent)

L84 ANSWER 101 OF 119 HCAPLUS COPYRIGHT 2005 ACS on STN
1997:769261 Document No. 128:95345 Electrophotographic photoreceptor using polymer charge-transporting substance. Shinmi, Tatsuya; Tamura, Hiroshi; Suzuki, Tetsuo; Kishida, Hiroshi; Kami, Hidetoshi (Ricoh Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 09311479 A2 19971202 Heisei, 49 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1996-150491 19960523.

IT **200950-62-5**
RL: TEM (Technical or engineered material use); USES (Uses)
(charge-transporting compound, in charge-generating layer; electrophotog. photoreceptor using polymer charge-transporting compound for abrasion resistance and high sensitivity)

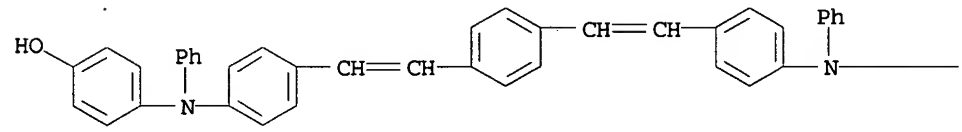
RN 200950-62-5 HCAPLUS

CN Carbonic acid, polymer with 1,6-hexanediol and 4,4'-[1,4-phenylenebis[2,1-ethenediyl-4,1-phenylene(phenylimino)]]bis[phenol] (9CI) (CA INDEX NAME)

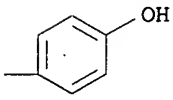
CM 1

CRN 152849-02-0
CMF C46 H36 N2 O2

PAGE 1-A

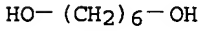


PAGE 1-B



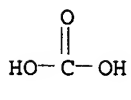
CM 2

CRN 629-11-8
CMF C6 H14 O2



CM 3

CRN 463-79-6
CMF C H2 O3



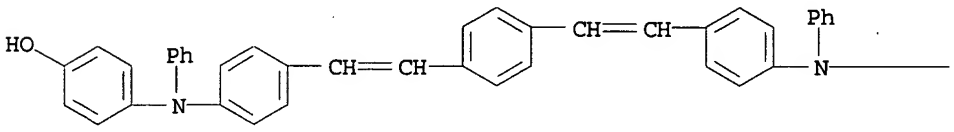
IT **200950-30-7**
RL: TEM (Technical or engineered material use); USES (Uses)
(charge-transporting compound, in charge-transporting layer; electrophotog. photoreceptor using polymer charge-transporting

compound for abrasion resistance and high sensitivity)
RN 200950-30-7 HCAPLUS
CN Carbonic acid, polymer with 1,4-butanediol and 4,4'-[1,4-phenylenebis[2,1-ethenediyl-4,1-phenylene(phenylimino)]]bis[phenol] (9CI) (CA INDEX NAME)

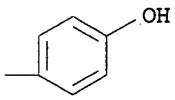
CM 1

CRN 152849-02-0
CMF C46 H36 N2 O2

PAGE 1-A

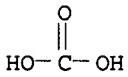


PAGE 1-B



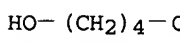
CM 2

CRN 463-79-6
CMF C H2 O3



CM 3

CRN 110-63-4
CMF C4 H10 O2



IC ICM G03G005-07
CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
IT 120359-10-6 174829-96-0 174830-33-2 178889-17-3
200950-62-5 200950-65-8 200950-67-0 200950-71-6
RL: TEM (Technical or engineered material use); USES (Uses)
(charge-transporting compound, in charge-generating layer; electrophotog. photoreceptor using polymer charge-transporting compound for abrasion resistance and high sensitivity)
IT 152758-86-6 200423-26-3 200423-27-4 200423-29-6 200863-48-5
200950-14-7 200950-15-8 200950-17-0 200950-19-2 200950-20-5
200950-21-6 200950-22-7 200950-23-8 200950-24-9 200950-25-0
200950-26-1 **200950-30-7** 200950-32-9 200950-33-0
200950-36-3 200950-37-4 200950-38-5 200950-40-9 200950-43-2

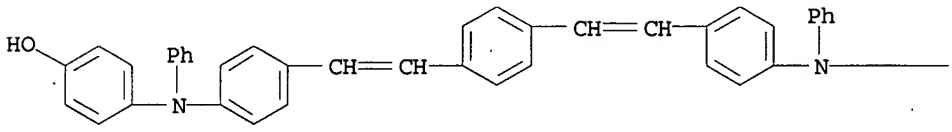
200950-46-5 200950-48-7 200950-49-8 200950-50-1 200950-51-2
200950-52-3 200950-53-4 200950-55-6 200950-56-7 200950-57-8
200950-58-9 201336-72-3
RL: TEM (Technical or engineered material use); USES (Uses)
(charge-transporting compound, in charge-transporting layer; electrophotog. photoreceptor using polymer charge-transporting compound for abrasion resistance and high sensitivity)

L84 ANSWER 106 OF 119 HCAPLUS COPYRIGHT 2005 ACS on STN
1997:762070 Document No. 128:95333 Electrophotographic imaging process using polymeric charge-transporting agent. Shinmi, Tatsuya; Nagame, Hiroshi; Tamura, Hiroshi; Ojima, Shigeto; Aoto, Atsushi; Suzuki, Tetsuro; Ikino, hiroshi; Kami, Hidetoshi (Ricoh Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 09304955 A2 19971128 Heisei, 34 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1996-146523 19960517.
IT **200863-50-9**
RL: DEV (Device component use); USES (Uses)
(electrophotog. imaging process using polymeric charge-transporting agent with improved durability in repeated use)
RN 200863-50-9 HCAPLUS
CN Carbonic acid, polymer with 4,4'-(1-methylethylidene)bis[phenol] and 4,4'-[1,4-phenylenebis[2,1-ethenediyl-4,1-phenylene(phenylimino)]]bis[phenol] (9CI) (CA INDEX NAME)

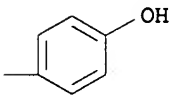
CM 1

CRN 152849-02-0
CMF C46 H36 N2 O2

PAGE 1-A

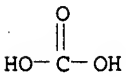


PAGE 1-B



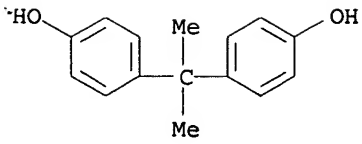
CM 2

CRN 463-79-6
CMF C H2 O3



CM 3

CRN 80-05-7
CMF C15 H16 O2



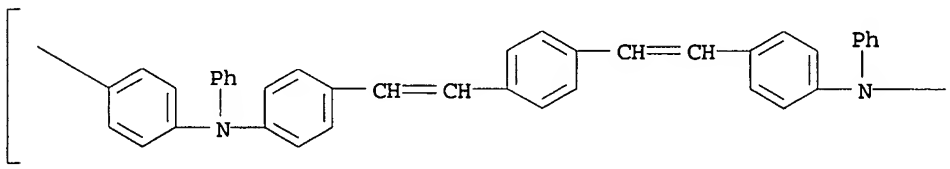
IC ICM G03G005-07
CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
IT 174830-28-5 200423-52-5 200863-48-5 200863-49-6
200863-50-9 200863-52-1 200863-53-2 200863-55-4
200863-57-6 200863-58-7
RL: DEV (Device component use); USES (Uses)
(electrophotog. imaging process using polymeric charge-transporting agent with improved durability in repeated use)

L84 ANSWER 111 OF 119 HCAPLUS COPYRIGHT 2005 ACS on STN
1996:738938 Document No. 126:124453 Use of glass-forming liquid crystal materials for electroluminescent diodes. Tsutsui, T.; Lin, C. P.; Saito, S.; Chen, S. H.; Shi, H.; Mastrangelo, J. C. (Grad. Sch. Eng. Sci., Kyushu Univ., Fukuoka, 816, Japan). Materials Research Society Symposium Proceedings, 425(Liquid Crystals for Advanced Technologies), 225-232 (English) 1996. CODEN: MRSPDH. ISSN: 0272-9172. Publisher: Materials Research Society.
IT **178483-30-2 186183-91-5**
RL: DEV (Device component use); USES (Uses)
(use of glass-forming liquid crystal materials for electroluminescent diodes)
RN 178483-30-2 HCAPLUS
CN Poly[oxy-1,8-octanediyloxy-1,4-phenylene(phenylimino)-1,4-phenylene-1,2-ethenediyl-9,10-anthracenediyl-1,2-ethenediyl-1,4-phenylene(phenylimino)-1,4-phenylene] (9CI) (CA INDEX NAME)

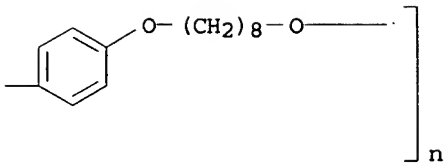
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *
RN 186183-91-5 HCAPLUS
CN Poly[oxy-1,8-octanediyloxy-1,4-phenylene(phenylimino)-1,4-phenylene-1,2-ethenediyl-1,4-phenylene-1,2-ethenediyl-1,4-phenylene(phenylimino)-1,4-phenylene] (9CI) (CA INDEX NAME)

PAGE 1-A

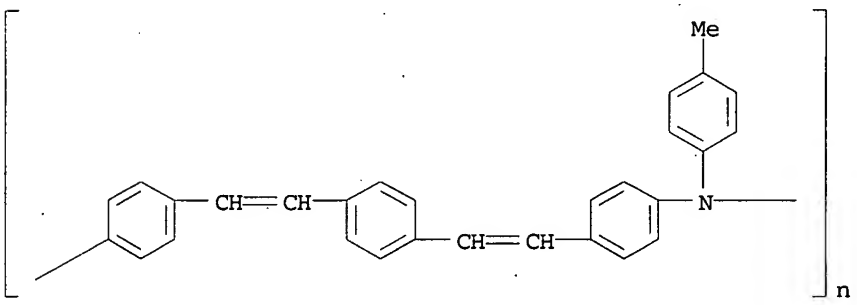


PAGE 1-B



CC 73-11 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
Section cross-reference(s): 75
IT 37271-44-6 50926-11-9, ITO 165903-53-7 165903-54-8
178483-30-2 186183-91-5 186183-92-6
186183-93-7 186183-94-8
RL: DEV (Device component use); USES (Uses)
(use of glass-forming liquid crystal materials for electroluminescent diodes)

L84 ANSWER 116 OF 119 HCAPLUS COPYRIGHT 2005 ACS on STN
1984:148493 Document No. 100:148493 Electrically photosensitive polymers containing vinylene-1,4-phenylene-imino-1,4-phenylene-vinylenearylene groups. Corvan, Peter J.; Kaeding, Jeanne E.; Rodriguez, Cesar; Rule, Norman G. (Eastman Kodak Co., USA). U.S. US 4423203 A 19831227, 9 pp. (English). CODEN: USXXAM. APPLICATION: US 1982-409800 19820820.
IT **89119-13-1P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and use of, as elec. photosensitive material for migration imaging)
RN 89119-13-1 HCAPLUS
CN Poly[[(4-methylphenyl)imino]-1,4-phenylene-1,2-ethenediyl-1,4-phenylene-1,2-ethenediyl-1,4-phenylene] (9CI) (CA INDEX NAME)



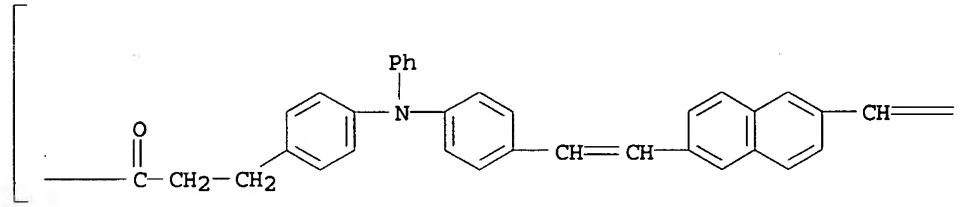
IC C08G012-04
INCL 528266000
CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT **89119-13-1P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and use of, as elec. photosensitive material for migration imaging)

L84 ANSWER 119 OF 119 HCAPLUS COPYRIGHT 2005 ACS on STN
1978:14266 Document No. 88:14266 Novel compounds having utility in photoconductive elements. Wright, Hal Eldon; Berwick, Martin Alfred (UK). Research Disclosure, 158, 23-31 (No. 15827) (English) 1977. RD 158027 19770610. CODEN: RSDSBB. ISSN: 0374-4353. PRIORITY: RD 1977-158027 **19770610**.

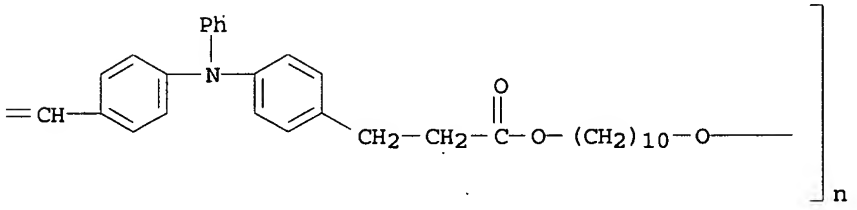
IT **64815-71-0 64815-72-1 64819-17-6**
64819-21-2 64819-23-4 64853-23-2
RL: USES (Uses)
(electrophotog. sensitizer, for organic photoconductive compns.)

RN 64815-71-0 HCAPLUS
CN Poly[oxy-1,10-decanediyloxy(1-oxo-1,3-propanediyl)-1,4-phenylene(phenylimino)-1,4-phenylene-1,2-ethenediyl-2,6-naphthalenediyl-1,2-ethenediyl-1,4-phenylene(phenylimino)-1,4-phenylene(3-oxo-1,3-propanediyl)] (9CI) (CA INDEX NAME)

PAGE 1-A

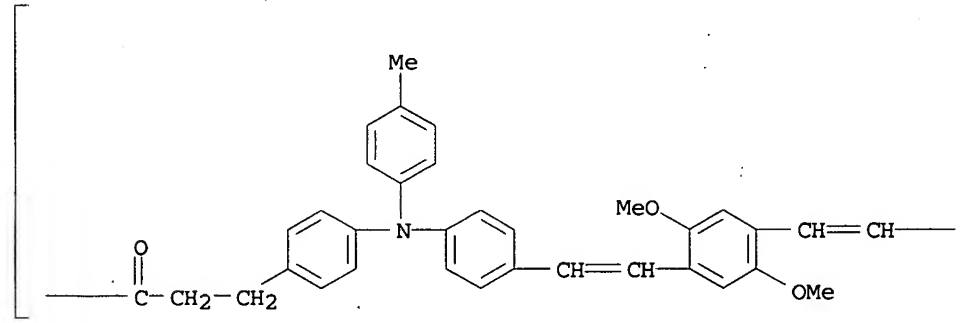


PAGE 1-B

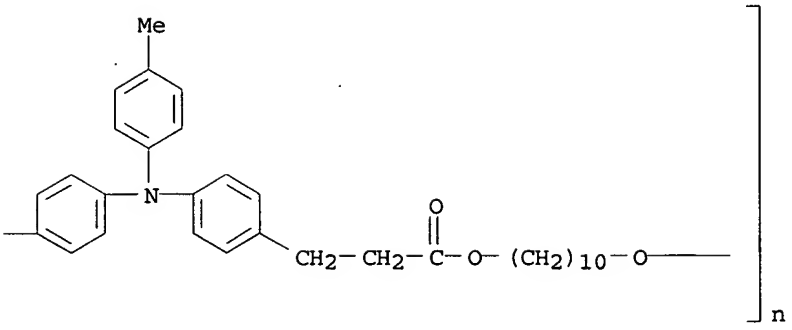


RN 64815-72-1 HCAPLUS
CN Poly[oxy-1,10-decanediyloxy(1-oxo-1,3-propanediyl)-1,4-phenylene[(4-methylphenyl)imino]-1,4-phenylene-1,2-ethenediyl(2,5-dimethoxy-1,4-phenylene)-1,2-ethenediyl-1,4-phenylene[(4-methylphenyl)imino]-1,4-phenylene(3-oxo-1,3-propanediyl)] (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

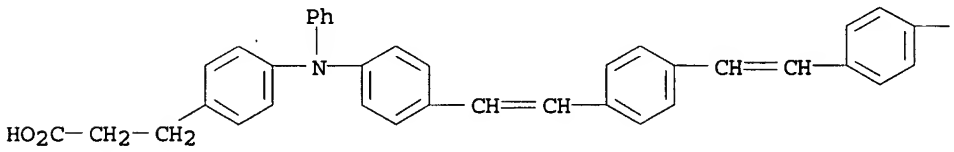


RN 64819-17-6 HCAPLUS
CN Benzenepropanoic acid, 4,4'-[1,4-phenylenebis[2,1-ethenediyl-4,1-phenylene(phenylimino)]]bis-, polymer with 1,10-decanediol (9CI) (CA INDEX NAME)

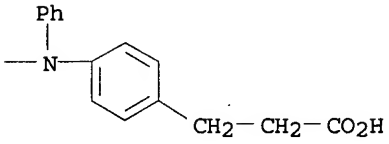
CM 1

CRN 64819-16-5
CMF C52 H44 N2 O4

PAGE 1-A

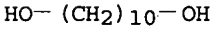


PAGE 1-B



CM 2

CRN 112-47-0
CMF C10 H22 O2

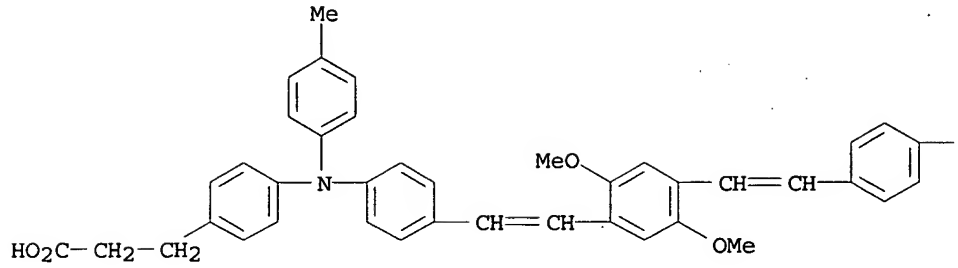


RN 64819-21-2 HCAPLUS
CN Benzenepropanoic acid, 4,4'-[(2,5-dimethoxy-1,4-phenylene)bis[2,1-ethenediyl-4,1-phenylene[(4-methylphenyl)imino]]]bis-, polymer with 1,10-decanediol (9CI) (CA INDEX NAME)

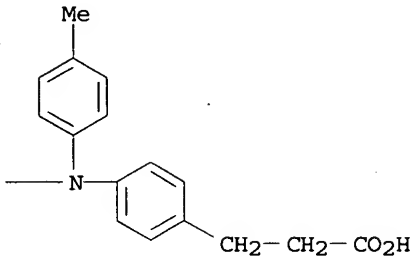
CM 1

CRN 64819-20-1
CMF C56 H52 N2 O6

PAGE 1-A

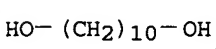


PAGE 1-B



CM 2

CRN 112-47-0
CMF C10 H22 O2

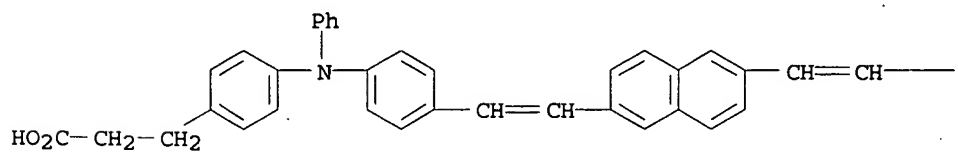


RN 64819-23-4 HCAPLUS
CN Benzenepropanoic acid, 4,4'-[2,6-naphthalenediylbis[2,1-ethenediyl-4,1-phenylene(phenylimino)]]bis-, polymer with 1,10-decanediol (9CI) (CA INDEX NAME)

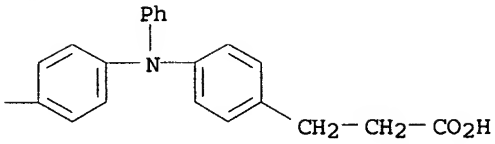
CM 1

CRN 64819-22-3
CMF C56 H46 N2 O4

PAGE 1-A



PAGE 1-B



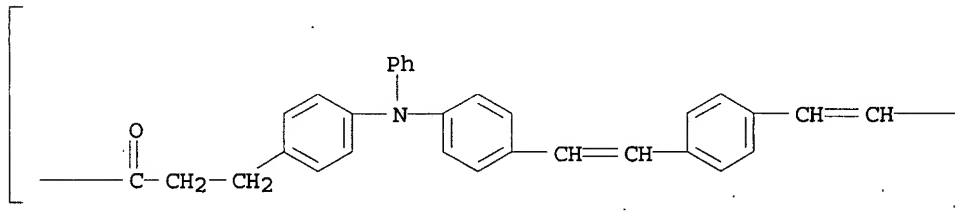
CM 2

CRN 112-47-0
CMF C10 H22 O2

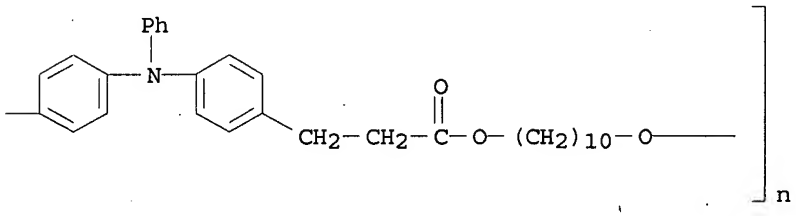
$HO-(CH_2)_{10}-OH$

RN 64853-23-2 HCAPLUS
CN Poly[oxy-1,10-decanediyloxy(1-oxo-1,3-propanediyl)-1,4-phenylene(phenylimino)-1,4-phenylene-1,2-ethenediyl-1,4-phenylene-1,2-ethenediyl-1,4-phenylene(phenylimino)-1,4-phenylene(3-oxo-1,3-propanediyl)] (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic Processes)
IT 64815-66-3 64815-67-4 64815-68-5 64815-69-6 64815-70-9
64815-71-0 **64815-72-1** 64815-73-2 64815-74-3
64819-15-4 **64819-17-6** 64819-19-8 **64819-21-2**
64819-23-4 64819-24-5 64819-25-6 64819-26-7
64819-27-8 64844-90-2 64844-92-4 64853-21-0 64853-22-1
64853-23-2 65294-99-7
RL: USES (Uses)
(electrophotog. sensitizer, for organic photoconductive compns.)

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